THE

Maryland State College of Agriculture

QUARTERLY

ENTERED AT COLLEGE PARK (MD.) POST OFFICE AS SECOND-CLASS MATTER.

No. 83 FEBRUARY 1919

FERTILIZER ANALYSES

Pages 4-19

FERTILIZER REGISTRATIONS, Pages 20-32

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Published for the Benefit of Agriculture, and Sent Free to Anyone Desiring a Copy
Names Wanted for Mailing-List

Issued in the Months of February, May, August and November

ADDRESS

Chemical Department, Maryland State College of Agriculture
COLLEGE PARK, MD.

ANALYSES OF

Fertilizers Sold in Maryland

BY THE DIVISION OF APPLIED SCIENCE OF

The Maryland State College of Agriculture

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The tables on the following pages are made up of the results of the Analysis of fertilizers made at the College from August, 1918, to January, 1919, inclusive.

The majority of the samples analyzed are obtained by our sampling agents, the samples being taken while the goods are in transit, on vessels, wharves, cars or stations, from farmers' wagons, barns, etc. It is impossible for us to analyze all samples we collect; duplicates are generally omitted.

When a sample has been sent in by a farmer, his name, or initials, will be found after the "place of sampling." If "place of sampling" is not given, the sample has been made up two or more samples taken at different places. Before sending samples of fertilizer for analysis, farmers should always send for blank forms and directions, stating the number of blanks wanted. One blank is required for each sample. No sample will be analyzed unless the proper blank form is used.

The figures in the columns headed "Ammonia," "Potash" and "Phosphoric Acid,' are percentages, or pounds per hundred. To get pounds per ton multiply the per cent by 20. The columns headed "Found" contain the results found by analysis; those headed "Guaranteed" contain the essential parts of the guarantee as stamped on the bags.

The "Comparative Value Found" is calculated from the results of analysis as found in our laboratory: the "Comparative Value Guaranteed" is calculated from the manufacturers' guaranteed analysis as printed on the bags; in each case using the following schedule:

SCHEDULE FOR CALCULATING COMPARATIVE VALUES.

In Mixed Fertilizers:

For Nitrogen, calculated as Ammonia	40	cts. per lb.,	$8.00 per unit
For potash (K_2O)	30	cts. per lb.,	6.00 per unit
For Available Phosphoric Acid	7½	cts. per lb.,	1.50 per unit
For Insoluble Phosphoric Acid	2	cts. per lb.,	0.40 per unit
For Insoluble Phosphoric Acid when from rock	1	ct. per lb.,	0.20 per unit

In Dissolved Rock:

Available Phosphoric Acid	7½	cts. per lb.,	1.50 per unit
Insoluble Phosphoric Acid	1	ct. per lb.,	0.20 per unit

In Tankage:

For Nitrogen, calculated as Ammonia	40	cts. per lb.,	8.00 per unit
For Phosphoric Acid	3	cts. per lb.,	0.60 per unit

In Ground Bone:

For Nitrogen, calculated as Ammonia	40	cts. per lb.,	8.00 per unit
For Phosphoric Acid	3	cts. per lb.,	0.60 per unit

Special attention is invitated to the comparative values per unit in the above schedule. It is very much easier to make calculations on the unit basis. Thus Dried Blood containing 10 per cent. of Ammonia selling for $8.00 per unit. It means that the selling price is the per unit value multiplied by the per cent. of Ammonia, or in this case $80.00 per ton. In the case of a "Complete Fertilizer" with the analysis 2–8–2, if Ammonia is worth $8.00 per unit, Available Phosphoric Acid $1.50 per unit and Potash $6.00 per unit the value per ton would be $16.00, plus $12.00, plus $12.00 giving a value of $40.00 per ton.

Consumers, of fertilizer should, as a rule, purchase the "High-Grade" goods, as the price per unit and the cost of bags, handling, etc., is less for the actual amount of fertilizer received than is the case if "Low-Grade" fertilizers are used. The latter are frequently made by using large amounts of filler.

In the purchase of Acid Phosphate one should always demand the 16 per cent. goods or better. Acid Phosphate containing 18 per cent. may sometimes be obtained. The consumers should be willing to pay more for the 18 per cent. than for the 16 per cent. Goods. There is no excuse, whatever, for 10 per cent. and 12 per cent. Acid Phosphate. It is made from the high grades by mixing in a make-weight or filler. Neither is there any excuse for Mixed Fertilizers containing less than 1 per cent. of either Ammonia or Potash, if these are present. The Fertilizer Manufacturer's Association is now working on a scheme to eliminate "Low-Grade" fertilizers from the market and never use less than 2 per cent. of Ammonia in an ammoniated fertilizer, never less than 2 per cent. of Potash in fertilizer containing Potash, and not less than 14 per cent. of total plant food, counting the Ammonia, Phosphoric Acid and Potash together. If this can be done, it will mean a great saving to the farmers, in the handling of extra weight, bags, freight, hauling, etc. However, the success of such a movement will depend to a considerable extent on the attitude of the buyer. If he insists on the stuff that is cheaper per ton, without regard to the amount of actual plant food, it is probable that he will be accommodated.

Prices of fertilizers and fertilizer materials are slightly lower than they were last Fall, and the endency seems to be slowly downward. It does not appear likely, however, that prices will fall rapidly. The greatest increase in price over pre-war prices has been in Potash; the importation of which has not been resumed, and, when it is, it will probably be on a comparatively small scale at first, and ocean freights will be high, so there will be no sudden drop in price.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Alexandria Fertilizer & Chem. Co.,	**Alexandria, Va.**										
38147	Reliable Amm'd Super-Phos....	Baltimore.....	1.27	1.25	.....	.....	1.75	.....	10.86	10.00	$27.15	$25.00
	American Agricultural Chemical	**Co., N. Y., N. Y.**										
38043	Acid Phosphate 14%.....	Easton.....	.....	.....	.....	.....	1.00	.....	14.30	14.00	21.65	21.00
38037	Acid Phosphate 16%.....	Baltimore.....	.....	.....	.....	.....	1.00	.....	16.02	16.00	24.23	24.00
38015	Ammoniated Fertilizer "A"....	Baltimore.....	1.35	1.00	.....	.....	1.22	.....	10.42	10.00	26.92	23.00
38126	Ammoniated Fertilizer "AA"...	Laurel.....	2.01	2.00	.....	.....	.85	.....	10.88	10.00	32.74	31.00
38000	Ammoniated Fertilizer "AAAA"	Baltimore.....	4.15	4.00	.....	.....	1.42	.....	10.54	10.00	49.58	47.00
38084	Ammoniated Fertilizer "XXX"	Ellicott City.....	1.25	1.50	.....	.....	.80	.....	10.36	10.00	25.86	27.00
38128	Amm'd Super-Phos. (LowGrade)	Baltimore.....	1.04	1.00	.....	.....	1.15	.....	8.27	8.00	21.19	20.00
38081	Ammoniated Super Phosphate..	Baltimore.....	2.17	2.00	.....	.....	1.30	.....	12.14	12.00	36.09	34.00
38001	Basic Lime Phosphate (Low Grade)	Baltimore.....	.....	.....	.....	.....	1.57	1.00	14.13	13.00	21.51	19.70
38082	Challenge Phosphate & Potash..	Baltimore.....	.....	.....	1.72	2.00	.90	.....	13.25	12.00	30.38	30.00
38101	Dead Shot Phosphate (Low Grade)	Union Bridge.....	.67	.50	.84	1.00	.75	.....	8.56	8.00	23.54	22.00
38097	Diamond Wheat & Grass Spec..	Baltimore.....	1.55	1.50	.....	.....	1.07	.....	10.36	10.00	28.37	27.00
38044	Dissolved Phosphate & Potash..	Sharptown.....	.....	.....	1.52	2.00	.90	.....	11.95	10.00	27.23	27.00
38038	Fine Ground Bone.....	Baltimore.....	3.26	3.00	..	.....	*24.36	*22.88	.....	.....	40.70	37.73
38016	Fish Guano 1916.....	Baltimore.....	1.09	1.00	1.20	1.00	.82	.....	8.49	8.00	28.99	26.00
38045	High Grade Ground Bone.....	Perryman.....	4.66	4.00	.....	.....	*21.66	*20.59	.....	...	50.28	44.35
38094	Special Bone Mixture	Baltimore.....	1.62	1.50	.....	.....	6.50	.....	13.84	19.00	36.32	40.50
38002	Special Complete Fertilizer.....	Baltimore.....	1.13	1.00	1.83	2.00	1.03	.....	8.88	8.00	33.75	32.00
38129	Star Phos. with Potash (Low Grade)	Baltimore.....	.....	.....	.96	1.00	.92	.....	10.24	10.00	21.30	21.00
38083	Sweepstakes Grain & Grass Mix.	Baltimore.....	1.37	1.00	.....	.....	.82	.....	12.17	12.00	29.55	26.00

38113	Wizard Phosphate (Low Grade)	Baltimore	.39	.50	.....	.....	.90	.....	8.46	8.00	16 17	16.00
	A. A. C. Co., (Canton), Balto., Md.											
38152	Baker's Spec. Wht., Corn & Grs.	Baltimore	1.14	1.00	.92	1.00	1.23	.....	9.40	9.00	29.23	27.50
	A. A. C. Co., (Detrick), Balto., Md.											
38039	Imperial Compound	Baltimore	1.11	1.00	.88	1.00	1.28	.....	10.53	10.00	30.47	29.00
	A. A. C. Co., (Lazaretto), Balto., Md.											
38027	Ammoniated Phosphate 1916	Baltimore	1.19	1.00	1.08	1.00	.84	....	8.02	8.00	28.37	26 00
38154	Early Trucker	Baltimore	4.27	5.00	1.18	1.00	1.10	.....	9.14	7.00	55.39	56.50
	A. A. C. Co., (Susquehanna), Balto., Md.											
38085	Crop Grower (Low Grade)	Baltimore	1.19	1.00	.84	1.00	1.05	.....	8.67	7.00	27.99	24.50
	A. A. C. Co., (Zell), Baltimore, Md.											
38017	Economizer Phosphate 1916	Baltimore	1.09	1.00	1.10	1.00	.80	.....	8.76	8.00	28.78	26.00
38125	Hustler Phosphate	Baltimore	1.11	1.00	1.02	1.00	1.58	.....	10.03	10.00	30.68	29.00
38127	Little Treasure (Low Grade)	Laurel	1.11	1.00	1.04	1.00	.72	.....	8.87	7.00	28.72	24.50
	American Fertilizing Co., Balto., Md.											
38095	Acid Phosphate High Grade	Baltimore	.....	.....	.....	.....	.27	.....	15.64	14.00	23.51	21.00
38096	Acid Phosphate 12% (Low Grade)	Baltimore	.....	.....	.....	.....	.40	.....	12.97	12.00	19.54	18.00
38018	Ammoniated Fertilizer "XXX"	Baltimore	1.67	1.50	.....	.....	1.18	.....	10.26	10.00	29.22	27.00
38102	Dissolved Bone	Hampstead	2.25	2.00	.....	.....	5.20	1.00	10.20	10.00	27.38	31.40
38148	Dissolved Phos. & Potash (L.G.)	Baltimore	.....	.....	1.20	1.00	1.48	.....	10.78	10.00	23.67	21.00
38098	Dissolved Phosphate & Potash	Baltimore	.....	.....	2.14	2.00	1.13	.....	8.93	10.00	26.47	27.00
38086	Eagle Super-Phos. (Low Grade)	Ellicott City	.63	.50	.....	.....	1.40	1.00	8.58	8.00	18.47	16.40
38087	Fish & Bone Special	Ellicott City	2.02	2.00	.....	.....	1.80	1.00	13.39	11.00	36.97	32.90
38003	Gen. Reliable Amm'd Form (L.G.)	Baltimore	.75	.50	.....	.....	1.57	.....	10.08	10.00	21.75	19.00
38004	Special Fish Guano	Baltimore	1.19	1.00	.....	.....	1.25	1.00	10.50	10.00	25.77	23.40
38133	Special Formula (Low Grade)	Baltimore	.75	.50	2.04	2.00	.98	.....	8.19	8.00	30.92	28.00
	Armour Fertilizer Works, Inc., Balto., Md.											
38005	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	1.65	.....	16.12	16.00	24.51	24.00
38028	Bone Meal	Baltimore	3 24	3.00	.....	.....	*22.97	*22.00	.....	.....	39.70	37.20
38088	Crop Grower	Baltimore	1.09	1.00	2.04	2.00	.77	.....	8.60	8.00	34.17	32.00
38140	Grain Grower	Baltimore	1.95	2.00	2.06	2.00	2.05	.....	9.04	8.00	42.34	40.00
38029	1-10-0 Fertilizer	Baltimore	1.25	1.00	.....	.....	1.20	.....	10.18	10.00	25.75	23.00
38114	Phosphate & Potash No. 1	Baltimore	.....	.....	1.96	2.00	1.02	.....	10.14	10.00	27.17	27.00
38115	Raw Bone Meal	Baltimore	5.32	4.50	.....	.....	*24.23	*21.50	.....	.....	57.10	48.90
38458	Special Mixture	Mt. Airy (C. E. A.)	2.29	2.00	.....	.....	3.75	.....	14.60	13.00	41.72	35.50

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Armour Fertilizer Works, Inc., Ba	**ltimore, Md.**										
38046	Star Phosphate	Easton	.....	.....	.....	.....	1.25	.....	15.25	14.00	$23.13	$21.00
38153	3-10-0 Fertilizer	Baltimore	2.76	3.00	.....	.....	1.65	.....	10.08	10.00	37.86	39.00
38030	2-10-0 Fertilizer	Baltimore	2.13	2.00	.....	.....	1.21	.....	10.07	10.00	32.63	31.00
38116	2-12-0 Fertilizer	Baltimore	1.86	2.00	.....	.....	1.58	.....	12.80	12.00	34.71	34.00
38047	Wh't, Corn & Oats Spec. (L.G.)	Easton	1.04	1.00	1.06	1.00	1.08	.....	6.38	7.00	24.68	24.50
38117	Tuscarora Acid Phos. 16%	Baltimore	.....	.....	.....	.....	.60	.....	17.16	16.00	25.86	24.00
	Baltimore Fertilizer Co., Balto.,	**Md.**										
38048	Dissolved Amm'd Bone 2-10	Bel Air	1.76	2.00	.....	.....	1.98	.....	10.25	10.00	30.25	31.00
38049	Dissolved Bone	Bel Air	1.45	2.00	.....	.....	1.75	.....	11.42	12.00	29.43	34.00
38141	Honest Acid Phosphate	Baltimore	.....	.....	.....	.....	.95	.....	15.39	14.00	23.28	21.00
38050	Honest Acid Phosphate	Bel Air	.....	.....	.....	.....	.32	1.00	17.18	16.00	25.83	24.20
38103	Honest Ammoniated Bone	Bel Air	1.67	2.00	.....	.....	1.02	.....	10.98	9.50	30.24	30.25
38040	Honest Tank-Rock & Pot. (L.G.)	Baltimore	.72	.50	.40	.25	1.25	.....	7.09	7.00	19.30	16.00
38104	Honest Wheat Grower	Bel Air	1.03	1.00	.....	.....	1.00	.....	9.90	9.00	23.49	21.50
38156	Old Honesty (Low Grade)	Baltimore	1.19	1.00	.....	.....	2.65	.....	8.11	8.00	22.75	20.00
	Baltimore Pulverizing Co., Balto.,	**Md.**										
38006	Ammoniated Butchers' Bone	Baltimore	1.66	1.50	1.16	1.00	.88	.....	9.40	9.00	34.69	31.50
38450	Corn & Grain Grower	Ellicott City (C.N.P.)	.....	.....	1.06	1.00	2.88	.....	11.24	12.00	23.80	24.00
38118	Pure Dissolved Animal Bone	Baltimore	1.30	2.00	.....	.....	.60	.....	13.43	13.00	30.79	35.50
38119	S. C. Phosphate 16%	Baltimore	.....	.....	.....	.....	.22	.....	17.05	16.00	25.62	24.00
38041	Special Spring & Fall (L. G.)	Baltimore	.....	.....	.92	1.00	2.85	.....	6.89	8.00	16.43	18.00

	Baugh & Sons Co., Baltimore, Md.											
38021	Acid Phosphate 16%	Baltimore					.65		17.41	16.00	26.25	24.00
38155	Acid Phosphate High Grade 14%	Baltimore					2.05		14.05	14.00	21.49	21.00
38149	Ammoniated Super Phosphate	Baltimore	1.26	1.25			1.03		10.48	10.00	26.21	25.00
38008	General Crop Grower	Baltimore	1.42	1.00	1.20	1 00	1.70		8.58	8.00	32.11	26.00
38009	Half & Half Mixture	Baltimore	1.67	1.50			8.90		11.95	12.00	34.85	30.00
38019	Old Stand-By Dis. Animal Base	Baltimore	2.05	2.00			.75		11.70	12.00	34.25	34.00
38042	Peninsula Grain Producer	Baltimore	1.45	1.00			.79		8.80	9.00	25.12	21.50
38031	Pure Dissolved Bone	Baltimore	2.58	2 50			4 52		12.71	13.00	41.52	39.50
38020	Pure Steamed Bone	Baltimore	2.10	2.00			*26.30	*25.00			32.58	31 00
38010	Raw Bone Meal	Baltimore	4.10	4.00			*21.79	*20.50			45.87	44.30
38139	Soluble Alkaline	Boyds			1.82	2.00	2.95		10.01	10.00	26.53	27.00
38022	Wheat Fertilizer	Baltimore	2.05	2.00			2.15		10.33	10.00	32.76	31.00
	Beckley Fertilizer Co., Half Way, Md.											
38060	Bone Mixture	Half Way	1.37	1.50			1.22		14.24	14.00	32.81	33.00
	N. T. Bennett, New Windsor, Md.											
38106	Butcher House Phosphate	New Windsor	1.09	1.00			1.45	1.00	12.64	11.00	28.26	24.90
	Bowker Fertilizer Co., Boston, Mass.											
38089	Bone & Potash	Baltimore			1.74	2.00	1.42		10.55	10.00	26.55	27.00
38061	Crop Grower	Smithsburg	1.18	1.00	.88	1.00	.95		9.78	9.00	29.77	27.50
38062	Super-Phos. with Ammonia	Smithsburg	1.31	1.00			1.17		10.31	10.00	26.42	23.00
	Bryant Fertilizer Co., Alexandria, Va.											
38142	Phosphate 16%	Baltimore					1.65		16.02	16.00	24.36	24.00
	Herbert Bryant's Son, Alexandria, Va.											
38063	Acid Phosphate	Rockville					.72		16.46	16.00	24.83	24 00
38064	Standard Empress Amm'd Bone	Rockville	1.26	1.25			1.07		10.50	10.00	26.26	25.00
	Central Chemical Co., Hagerstown, Md.											
38065	Acme Brand (Low Grade)	Graceham	1.03	1.00			.87		8 95	8.00	22.02	20.00
38457	Dissolved Bone Compound	Hagerstown (T.L.S.)	2.18	2.25			1.82		13.55	13.00	38.50	37 50
38066	Dissolved Phosphate	Graceham					1.45		16.32	16.00	24.77	24.00
38067	Fish Bone & Potash	Boonsboro	1.26	1.25	.86	1.00	1.25		9.08	8.00	29.36	28.00
38068	Phoenix Fertilizer (Low Grade)	Graceham	.60	.50	.26	.50	.95		8.68	8.00	19.76	19.00
38069	Special Bone Mixture	Hagerstown	1.83	2.00			.55		11.26	10.00	31.75	31.00
38070	Superior	Graceham	.94	1.00			1.20		12.75	12.00	27.13	26.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Chesapeake Chemical Co., Balto., Md.											
38120	Dissolved Phosphate	Baltimore	.....	.....	.....	.....	.30	.....	17.79	16.00	$26.75	$24.00
38090	Money Producer	Baltimore	1.16	1.00	.....	.....	1.30	.....	8.68	10.00	22.82	23.00
	Josiah Cope & Co., Baltimore, Md.											
38150	Fish Guano	Baltimore	2.10	2.00	.....	.....	1.55	.....	8.48	8.00	30.14	28.00
38032	Wheat & Grass Special.	Baltimore	1.19	1.00	.86	1.00	1.10	.....	8.59	8.00	28.01	26.00
	Joshua W. Dorsey, Ellicott City, Md.											
38121	Mixture "D"	Baltimore	2.47	2 40	.....	.....	1.20	1 50	11.23	10.00	37.09	34.80
	Downing Phosphate Co., Brunswick, Ga.											
38051	Bone Valley Br. Pul. Untreated Phos.	Princess Anne	.....	.....	.....	.....	32.52	31.50	.....	.....	.....	.....
	Eastern Guano Co., New York, N. Y.											
38071	Dissolved Phosphate	Smithsburg	.....	.....	.....	.....	.35	.....	17.93	16.00	26.97	24.00
	Edelen Bros., Baltimore, Md.											
38143	Special Wheat & Grain Mixture	Baltimore	1.26	1.00	1.10	1.00	1.02	.....	9.09	8.00	30.73	26.00
	Farmers Exchange Co., Union Bridge, Md.											
38107	Acid Phosphate	Union Bridge	.....	.....	.....	.....	.08	.....	17.66	16.00	26.51	24.00
	W. S. Farmer & Co., Baltimore, Md.											
38011	All Crop Mixture No. 1	Baltimore	1.19	1.00	.....	.....	1.32	.....	10.01	10.00	25.07	23.00
38122	All Crop Mixture No. 2	Baltimore	2.03	2.00	.....	.....	1.25	.....	10.55	10.00	32 57	31.00
38144	Clyde Brand	Baltimore	1.08	1.00	.90	1.00	.95	.....	8.08	8.00	26.54	26.00

	Farmers Fertilizer & Feed Co., We	**stminster, Md.**										
38072	Carroll Phosphate (Low Grade)	Westminster	.63	.50			.78		8.86	8.00	18.64	16.00
38073	High Grade Phosphate	Westminster	1.76	2.00			1.78		11.85	11.00	32.57	32.50
38074	Indian Chief	Westminster	1.13	1.00			.70	1.00	11.33	11.00	26.32	24.90
38075	No. 2 Bone Phosphate	Westminster	1.62	2.00			1.68	1.00	9.96	9.00	28.57	29.90
38076	No. 3 Bone Phosphate (Low Grade)	Westminster	1.64	1.50			1.68	1.00	9.27	8.00	27.70	24.40
38077	XX Fertilizer	Westminster	1.02	1.00			1.32		10.76	9.00	24.83	21.50
	Farmers & Planters Co., Salisbury,	**Md.**										
38052	Early Vegetable	Marion	5 96	5.00			1.80		8.43	8.00	61.05	52.00
38053	Fish Mixture	Salisbury	1.37	2.00			.80		10.32	10.00	26.76	31.00
38054	General Crop Grower	Princess Anne	.96	1.00			1.55		12.65	11.00	27.28	24.50
38056	Truckers Mixture	Salisbury	2.93	3.50			.57		10.70	9.00	39.72	41.50
	Federal Chemical Co., Louisville,	**Ky.**										
38108	Daybr'k Tenn. Br'n Phos. Rock	Sparks					32.81	29.75				
	Greencastle Fert., Hide & Rend. Co	**., Greencastle, Pa.**										
38453	Bone Compound	Hagerstown (J.K.F.)	.72	2.00			1.00		16.10	10.00	30.31	31.00
	Griffith & Boyd Co., Baltimore, Md.											
38134	Acid Phosphate High Grade	Baltimore					.28		15.52	14.00	23.34	21.00
38099	Acid Phosphate High Grade	Baltimore					.42		17.58	16.00	26.45	24.00
38136	Animal Bone with Potash	Baltimore	1.66	2.00	1.46	1.00	.68		9.27	9.00	36.22	35.50
38033	Farmers Bone Mixture	Baltimore	1.71	2.00			1.50		8.91	9.00	27.65	29.50
38130	Farmers Gem	Baltimore	1.52	1.00			.90		9.09	10.00	26.16	23.00
38023	Fine Ground Bone Meal	Baltimore	4.33	4.00			*19.29	*20.00			46.21	44.00
38024	Fish & Bone Mixture (Low Grade)	Baltimore	1.33	1.75			.72		8.40	7.00	23.53	24.50
38109	Fish Bone & Potash	White Hall	1.40	1.75	1.36	1.00	.95		7.98	7.00	31.71	30 50
38137	Harvest Queen Phosphate	Baltimore	1.02	1.00	1.24	1.00	.75		7.43	9.00	27.05	27.50
38025	Peerless Mixture (Low Grade)	Baltimore	.63	.50			.45		8.70	8.00	18.27	16.00
38091	Special Grain Grower	Baltimore			1.28	2.00	.90		10.62	10.00	23.79	27.00
38034	Special Royal Guano	Baltimore	1.13	1.00	.70	1.00	1.02		8.16	8.00	25.89	26.00
	Griffith & Turner Co., Balto., Md.											
38151	Amm'd Butchers Bone Phos	Baltimore	1.19	1.25	.67	1.00	.83		9.79	9.00	28.56	29.50
	Hampstead Fertilizer Co., Hampst	**ead, Md.**										
38110	Grain & Grass Grower	Hampstead	1.83	2.00			.65		10.54	10.00	30.71	31.00
38111	Wheat Grower	Hampstead	1.19	1.00			.88		10.55	10.00	25.70	23.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	S. M. Hess & Bro., Inc., Phila., Pa.											
38057	Amm'd Spec. Fertilizer (Low Grade)	Pocomoke City	.77	.50	.....	.....	1.02	.....	8.07	8.00	$18.68	$16.00
38012	Gardners Manure	Baltimore	5.03	5.00	.....	.....	.85	.....	8.33	8.00	53.08	52.00
38013	Reliable Super Phosphate	Baltimore	3.21	3.00	.....	.....	1.27	.....	10.19	10.00	41.48	39.00
38014	Wheat & Grass Manure	Baltimore	1.08	1.00	1.04	1.00	.88	.....	9.29	9.00	29.17	27.50
	Home Fert. & Chemical Co., Balto., Md.											
38135	Dissolved Animal Bone	Baltimore	2.15	2.00	.....	.....	1.70	.....	11.58	12.00	35.25	34.00
	Horsey, Roe & Co., Greensboro, Md.											
38058	Acid Phosphate 16%	Greensboro	.....	.....	.....	.....	.62	.....	16.18	16.00	24.39	24.00
38059	Special Mixture	Greensboro	3.50	3.00	.....	.....	.75	.....	12.08	12.00	46.42	42.00
	Hubbard Fertilizer Co., Baltimore, Md.											
38157	Acid Phosphate 14%	Baltimore	.....	.....	.....	.....	2.70	.....	14.68	14.00	22.56	21.00
38026	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	1.05	.....	16.37	16.00	24.77	24.00
38036	Alkaline	Baltimore	.....	.....	1.70	1.00	.62	.....	12.35	12.00	28.85	24.00
38092	Columbia Phosphate (Low Grade)	Ellicott City	1.06	1.00	.....	.....	3.50	.....	8.02	8.00	21.91	20.00
38078	English Compound	Woodbine	1.13	1.00	1.18	1.00	2.07	.....	8.07	8.00	29.06	26.00
38079	Excelsior Mixture	Woodbine	1.74	2.00	.....	.....	1.10	.....	9.87	10.00	29.17	31.00
38145	Farmers IXL Fertilizer	Baltimore	2.22	2.00	2.08	2.00	1.20	.....	11.05	8.00	47.30	40.00
38080	Oriental Guano	Woodbine	1.09	1.00	.....	.....	1.90	.....	9.26	10.00	23.37	23.00
	M. P. Hubbard & Co., Inc., Balto., Md.											
38138	Atlas Guano	Baltimore	1.04	1.00	.....	.....	.72	.....	12.91	12.00	27.98	26.00

38093	Big Jim Compound (Low Grade) ..	Baltimore	.63	.50	.80	1.00	.05		8.86	8.00	23.15	22.00
38131	Dissolved Phosphate	Baltimore					.18		16.83	16.00	25.29	24.00
38124	Ever Ready Compound	Baltimore	1.01	1.00			.82		11.10	10.00	25.05	23.00
38123	Excelsior	Baltimore	1.02	1.00	2.04	2.00	.92		9.42	8.00	34.90	32.00
38100	Great Harvest	Baltimore	2.29	2.00			1.75		10.09	10.00	34.16	31.00
38146	Old Economy (Low Grade)	Baltimore	.51	.50	2.08	2.00	.55		8.71	8.00	29.85	28.00
38132	Soluble Phosphate & Potash	Baltimore			1.82	2.00	.35		10.38	10.00	26.56	27.00
	Lister's Agricultural Chemical Wor	**ks, Newark, N. J.**										
38592	Acid Phosphate	Rocky Ridge					.50		17.85	16.00	26.88	24.00
38699	Celebr. Gr'd. Bone & Tank. Acid	Baltimore	3.41	3.25			3.50		8.26	12.00	41.07	44.00
38559	Crescent Ammoniated Phosphate	Cambridge	2.15	2.00			1.15		10.84	10.00	33.92	31.00
38560	Fish Brand	Cambridge	1.74	1.50			1.00		11.05	10.00	30.90	27.00
38672	Golden Sheaf (Low Grade)	Baltimore	.73	.50	.90	1.00	.85		8.46	8.00	24.27	22.00
38548	Grass & Grain Fertilizer	Baltimore			1.78	2.00	.95		11.31	10.00	27.84	27.00
38500	Ground Bone Tankage	Baltimore	3.34	3.25			*12.99	*12.00			34.51	33.20
38536	Harvest Queen Fertilizer	Baltimore	1.64	1.50	1.10	1.00	1.10		10.82	10.00	36.39	33.00
38549	Soil Improver (Low Grade)	Baltimore	1.16	1.00			.90		9.11	8.00	23.31	20.00
38550	Soluble Phosphate 12% (LowGr.)	Baltimore					.85		12.03	12 00	18.22	18.00
38651	Standard	White Hall	2.59	3.00	1.02	1.00	.72		9.96	9.00	42.07	43.50
	Martin Fertilizer Co., Phila., Pa.											
38501	Acid Phosphate 14%	Baltimore					.35		14.47	14.00	21.78	21.00
38652	Acid Phosphate	Parkton					.48		17.52	16.00	26.38	24.00
38665	Ammoniated Phosphate (L. Gr.)	Baltimore	.63	1.00			.55		11.56	8.00	22.60	20.00
38664	Ammoniated Phosphate	Baltimore	1.18	1.00			.95		7.58	10.00	21.19	23.00
38695	Ammoniated Phosphate	Leslie	1.96	2.00			1.05		11.14	8.00	32.81	28.00
38667	Corn & Cereal Special	Baltimore	2.02	2.00	.96	1.00	.60		8.02	8.00	34.19	34.00
38502	Crop Producer	Baltimore	1.35	1.25			1.63		10.85	10.00	27.74	25.00
38638	Dissolved Organic Comp. (L.Gr.)	Baltimore	1.31	1.25	.38	.50	3.10		9.49	9.00	28.24	26.50
38503	Pure Dissolved Animal Matter	Baltimore	1.76	2.00			.75		11 60	12.00	31.78	34.00
38682	Sure Grower	Leslie	1.26	1.00	.74	1 00	1.28		11.30	8 00	31.98	26.00
	Massey & Kilbourne, Chestertown,	**Md.**										
38561	Acid Phosphate 16%	Chestertown					.08		17.90	16.00	26.87	24.00
38562	Wheat Phosphate	Chestertown	1.57	1.00			1.18		10.04	9.00	28.09	21.50
	Medford Fertilizer Works, Medford,	**Md.**										
38653	No. 1 Phosphate	Medford	1.13	1.25			1.35		10.40	9.00	25.18	23.50
	F. Mehring, Keymar, Md.											
38593	Acid Phosphate	Keymar					.35		16.93	16.00	25.47	24.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	F. Mehring, Keymar, Md.											
38594	Wheat & Grass Producer	Keymar	1.31	1.25	.....	.....	.78	.....	16.72	13.50	$35.87	$30.25
	Miller & Cramer, Woodsboro, Md.											
38595	Acid Phosphate	Woodsboro.	.....	.....	.....	.....	.25	.....	16.73	16.00	25.15	24.00
38596	Wheat & Grass Fertilizer	Woodsboro.	.90	1.00	.....	.....	1.25	.....	14.75	10.00	29.83	23.00
	Miller Fertilizer Co., Balto., Md.											
38645	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	.30	.....	16.95	16.00	25.49	24.00
38646	Ammon'd Dissolved Bone (L. G.)	Baltimore	1.57	1.75	.52	.50	.85	.....	8.68	8.00	29.04	29.00
38504	Ammon'd Dissolved Bone (L. G.)	Baltimore	1.66	1.75	.80	.50	.55	.....	8.97	8.00	31.76	29.00
38694	Club Brand (Low Grade)	Ellicott City	.70	.50	.60	.50	.68	.....	9.36	8.00	23.51	19.00
38661	Farmers Profit	Baltimore	1.84	1.75	.....	.....	.82	.50	10.35	9.00	30.58	27.70
38598	Hustler Phosphate (Low Grade)	Keedysville	1.21	1.00	.60	.50	1.35	.....	8.37	8.00	26.38	23.00
38673	No. 1 Hustler Phosphate	Baltimore	1.04	1.00	1.02	1.00	1.35	.....	7.78	8.00	26.65	26.00
38551	No. 1 Special	Baltimore	2.06	2.00	.....	.....	.45	.....	10.60	10.00	32 56	31.00
38662	No. 2 Special	Baltimore	1.38	1.25	.....	.....	.60	.....	9.66	10.00	25.77	25.00
38505	Pimlico Brand	Baltimore	3.02	3.00	.....	.....	.60	.....	8.92	8.00	37 78	36.00
38599	W. G. Phosphate (Low Grade)	Middletown	.75	.50	.56	.50	1.30	.....	7.77	7.00	21.54	17.50
	Nassaw Fertilizer Co., New York, N. Y.											
38668	Common Sense Fertilizer	Baltimore	1.88	2.00	.....	.....	1.65	.....	10 10	10.00	30.85	31.00
	G. Ober & Sons Co., Baltimore, Md.											
38506	Acid Phosphate High Grade	Baltimore	.....	.....	.....	.....	1.00	.....	16.61	16.00	25.12	24.00

38624	Climax Ammoniated Compound.	Ellicott City	2.33	2.00	.....	.....	.85	.....	14.28	12.00	40.88	34.00
38537	Dissolved Bone Phosphate 14%..	Baltimore	.....	.....	.....	.....	.08	.....	14.60	14.00	21.92	21.00
38507	Electro Compound	Baltimore	1.30	1.00	.....	.....	.63	.....	10.67	10.00	26.66	23 00
38538	Farmer's Mixture	Baltimore	1.35	1.00	1.90	2.00	1.10	.....	10.10	9.00	37.79	33.50
38663	Independ't Amm'd Super-Phos..	Baltimore	1.02	1.00	1.04	1.00	1.02	.....	8.99	8.00	28.30	26.00
38639	Liberty Fish Guano	Baltimore	1.40	1.25	.....	.....	.78	...	14.87	13.00	33.82	29.50
38690	Pure Bone Meal	Baltimore	3.04	3.00	.....	.....	*26.17	*22.00	.....	.....	40.02	37.20
38640	Royal Fish & Potash Compound.	Baltimore	2.03	2.00	1.02	1.00	1.02	.....	10.15	9.00	38.00	35.50
38654	Sol. Amm'd Super-Phos. of Lime	Owings Mills	1.67	2.00	2.12	2.00	1.52	.....	9.89	8.00	41.53	40,00
38641	Sun Beam Guano	Baltimore	2.25	2.00	.....	.....	1.05	.....	11.78	10.00	36.09	31.00
38508	10% Super-Phosphate & Potash.	Baltimore	.....	.....	2.04	2.00	1.65	.....	10.80	10.00	28.77	27.00
	Patapsco Guano Co., Baltimore, Md.											
38700	Acid Phosphate High Grade	Baltimore	.....	.....	.....	.....	.82	.....	17.78	16.00	26.83	24.00
38527	Blood, Bone & Potash 1916 (L.G.)	Baltimore	.80	.50	.92	1.00	.80	.....	9.01	8.00	25.76	22.00
38510	Coon Brand Guano 1916	Baltimore	1.18	1.00	1.24	1.00	.95	.....	9.44	9.00	31.42	27.50
38684	Golden Crop	Baltimore	2.03	2.00	.....		1.02	.....	10.50	10.00	32.40	31.00
38511	Plant Food with Potash	Baltimore	1.26	1.00	1.70	2.00	1.10	.....	8.88	8.00	34.04	32.00
38528	Sea Gull Guano	Baltimore	1.16	1.00	.88	1.00	.78	.....	8.78	8.00	28.04	26.00
38529	Soluble Phosphate & Potash	Baltimore	.....	.....	1.50	2.00	.95	.....	10.57	10.00	25.05	27.00
38563	Tobacco Fertilizer	Rhodesdale	2.49	3.00	1.60	2.00	.62	.....	9.53	9.00	44.07	49.50
	Peerless Fertilizer Co., Chestertown, Md.											
38564	Club Mixture (Low Grade)	Hurlock	.84	.50	.....	.....	.65	.....	10.19	8.00	22.27	16.00
38565	Wheat & Clover (Low Grade)	Chestertown	1.23	1.00	.....	.....	.75	.....	8.59	8.00	23.03	20.00
	Piedmont-Mt. Airy Guano Co., Baltimore, Md.											
38674	Levering's Excelsior Brand	Baltimore	1.04	1.00	1.58	1.00	.82	.....	9.43	8.00	32.28	26.00
38531	Levering's Standard	Baltimore	2.05	2.00	.....	.....	.70	1.00	9.28	8.00	30.60	28.40
38512	Peerless Phosphate (Low Grade)	Baltimore	1.25	1.00	.....	.....	.90	2.00	8.55	8.00	23.19	20.80
38532	Piedmont Acid Phosphate 16%..	Baltimore	.....	.....	.....	.....	.40	.....	17.31	16.00	26.05	24.00
38675	Pied. Acidulated Phos. & Potash	Baltimore	.....	.....	2.02	2.00	.70	.....	11.05	10.00	28.84	27.00
38459	Piedmont Complete Fertilizer	Chestertown (W.S.)	1.25	1.00	1.24	1.00	1.12	.....	10.34	10.00	33.40	29.00
38600	Piedmont Economy (L. Gr.)	Mt. Airy	.46	.25	.....	.....	.65	.....	10.76	10.00	20.08	17.00
38539	Piedmont Farmer's Pride	Baltimore	2.13	2.00	.....	.....	1.00	.....	12.83	12.00	36.69	34.00
38552	Piedmont ½-8-1 Fertilizer (L.G.)	Baltimore	.70	.50	1.06	1.00	.62	.....	9.21	8.00	26.03	22.00
38553	Piedmont ½-10-1 Fertilizer (L.G.)	Baltimore	.75	.50	1.12	1.00	.80	.....	10 12	10.00	28.22	25.00
38460	12 & 1 Fertilizer	Chestertown (W.M.S.)	.....	.....	.82	1.00	.82	.....	12.85	12.00	24.36	24.00
38463	12 & 1 Fertilizer	Chestertown (W.M.S.)	.....	.....	1.26	1.00	.75	.....	12.45	12.00	26.39	24.00
38540	Piedmont Raw Bone Meal	Baltimore	4.08	4.00	.....	.....	*21.20	*18.35	.....	.....	45.36	43.01

*Total Phosphoric Acid.

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							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Piedmont-Mt. Airy Guano Co., Baltimore, Md.											
38655	Piedmont Raw Bone Mixture...	Owings Mills	1.14	1.25	.80	1.00	1.02	.....	9.01	8.00	$27.85	$28.00
38541	Piedmont Special Crop Grower..	Baltimore.....	1.18	1.00	.....	.....	.98	.....	10.78	10.00	26.00	23.00
38601	Standard Dissolved Phosphate..	Mt. Airy.....	1.30	1.00	.....	.....	.98	2.00	11.02	10.00	27.32	23.80
	Pollock Fertilizer Co., Balto., Md.											
38554	Corn & Oats (Low Grade)	Baltimore.....	.80	.50	.90	1.00	.72	.....	8.89	8.00	25.43	22.00
38676	Corn, Wheat & Tomato Guano..	Baltimore.....	1.13	1.00	.86	1.00	1.15	.....	9.56	8.00	29.00	26.00
38513	Grain Special.....	Baltimore.....	1.50	2.00	.....	.....	1.18	.....	8.93	8.00	25.87	28.00
	Ramsburg Fertilizer Co., Frederick, Md.											
38602	Ammoniated Bone.....	Frederick.....	1.19	1.00	.....	.....	1.78	.....	11.35	11.00	27.26	24.50
38603	Excelsior Plant Food.....	Mt. Airy.....	1.96	2.00	.....	.....	3.18	.....	10.34	10.00	32.46	31.00
38605	Old Virginia Compound.....	Mt. Airy.....	1.13	1.00	.78	1.00	2.38	.....	10.53	8.00	30.47	26.00
38604	Queen (Low Grade)	Mt. Airy.....	.51	.50	.....	.....	.70	.....	11.26	10.00	21.25	19.00
38606	Super Phosphate	Germantown.....	.....	.....	.....	.....	1.18	.....	16.79	16.00	25.43	24.00
	Rasin-Monumental Co., Balto., Md.											
38514	Rasin's Acid Phosphate 16% ..	Baltimore.....	.....	.....	.....	.....	.80	.....	17.17	16.00	25.92	24.00
38656	Rasin's Alkaline Mixture (L.G.)	Hampstead	.....	.....	2.94	3.00	1.25	.....	8.15	8.00	30.12	30.00
38515	Rasin's Crop Preparation.....	Baltimore.....	2.06	2.00	.....	.....	1.42	1.00	11.75	10.00	34.68	31.40
38627	Rasin's Royal Amm'd Super-Phos.(L.G.)	Ellicott City.....	.82	.50	.....	.....	1.10	1.00	10.27	10.00	22.41	19.40
38660	Rasin's Sea Wall Special (L.Gr.)	Baltimore.....	.....	.....	.....	.....	1.70	.....	11.07	10.00	16.95	15.00
38691	Rasin's Special Crop Preparation	Baltimore.....	2.46	2.00	.....	.....	.88	1.00	11.44	10.00	37.19	31.40
38555	Rasin's Special Fish Mixture...	Baltimore.....	1.14	1.00	.....	.....	1.40	1.00	10.95	10.00	26.11	23.40

38566	Rasin's Special Fish & Bone....	Greensboro	1.88	2.00	.....	.....	1.10	.....	11.87	11.00	33.29	32.50
38607	Rasin's Special Mixture (L. Gr.)	Graceham.....	1.23	1.00	.....	.....	.90	.....	10.07	8.00	25.31	20.00
38543	Rasin's United Grain Grower...	Baltimore.....	1.16	1.00	2.07	2.00	1.12	1.00	8.06	8.00	34.24	32.40
38516	William Penn Crop Grower.....	Baltimore.....	1.11	1.00	1.04	1.00	.95	1.00	8.64	8.00	28.46	26.40
	Reindollar Co., Taneytown, Md.											
38608	Acid Phosphate	Taneytown	.....	.....	.....	.....	.25	.....	18.08	16.00	27.17	24.00
38609	Ammoniated Phosphate.....	Taneytown	2.12	2.00	.....	.....	.75	.....	13.42	12.00	37.39	34.00
	W. E. Robinson & Co., Bel Air, Md.											
38657	Veg. & Grain Grower (Low Gr.)	Fallston.....	2.12	2.00	.38	.25	1.45	.....	9.02	8.00	33.35	29.50
	F. S. Royster Guano Co., Balto., Md.											
38567	Acid Phosphate.....	Easton.....	.....	.....	.....	.....	1.10	.....	14.81	14.00	22.41	21.00
38568	Acid Phosphate 16% High Grade	Easton.....	.....	.....	.....	.....	.45	.....	16.73	16.00	25.19	24.00
38629	Corn & Oats Fertilizer (L. Gr.).	Ellicott City.....	1.37	1.00	...	.....	.85	.....	8.09	8.00	23.44	20.00
38647	Cuckoo Crop Grower	Baltimore.....	1.03	1.00	.94	1.00	.75	.....	8.04	8.00	26.24	26.00
38630	Flamingo Amm'd Super Phos...	Ellicott City.....	2.58	2.50	....	....	2.08	.....	12.11	12.00	39.64	38.00
38518	Grain & Grass Special (Low Gr.)	Baltimore.....	1.21	1.00	....	.....	1.05	.....	8.19	8.00	22.39	20.00
38631	Penguin Amm'd Super Phos....	Baltimore.....	1.76	2.00	....	....	2.09	.....	10.02	10.00	29.95	31.00
38648	Phosphate & Potash Mixture....	Baltimore.....	.....	....	.86	1.00	.80	.....	12.35	12.00	23.85	24.00
38649	Phosphate & Potash Mixture....	Baltimore.....	.....	.....	1.56	2.00	1.02	.....	9.21	10.00	23.38	27.00
38519	Phosphate & Potash Mix. (L. G.)	Baltimore.....	.....	....	.94	1.00	1.00	.....	10.05	10.00	20.92	21.00
38669	Potatomato Fish Mixture.....	Laurel.....	2.27	2.00	1.16	1.00	1.62	.....	9.62	8.00	40.20	34.00
38517	Royal Blue Amm'd Super-Phos.	Baltimore.....	1.30	1.00	....	.....	.85	.....	11.03	10.00	27.29	23.00
38610	Wheat, Oats & Barley.....	Rockville	1.09	1.00	2.02	2.00	1.00	.....	8.47	8.00	33.95	32.00
	Scott Fertilizer Co., Elkton, Md.											
28569	Ammoniated Base.....	Easton.....	2.04	2.00	.....	.....	.78	.....	13.12	12.00	36.31	34.00
38683	Crop Grower.....	North East	1.76	2.00	...	.....	.92	.....	10.24	8.00	29.81	28 00
38570	Phosphoric Acid Special.....	Elkton.....	.....	.....	....	.....	.75	1.00	16.66	16.00	25.14	24 20
38571	Pure Ground Raw Bone..... ..	Elkton.....	3.92	4.50	.....	....	*22.89	*21.00	....	..	45.09	48.60
38692	Soluble Phosphate & Potash....	Elkton.....	.....	.....	2.02	2.00	1.32	.....	12.64	12.00	31.34	30.00
38573	Sure Growth Super Phosphate..	Elkton.....	2.06	2.00	1.30	1.00	1.28	.....	9.10	8.00	38.44	34.00
38642	Tip Top Soluble Phosphate.....	Baltimore.....	....	...	.....	.....	.10	.....	17.35	16.00	26.05	24.00
38574	Tip Top Soluble Phosphate.....	Elkton.....	.....	.....	...	....	1.58	.....	15.60	14.00	23.72	21.00
	W. H. Streett & Co., Fallston, Md.											
38544	Ammoniated Dissolved Bone....	Baltimore.....	1.62	1.50	1.14	1.00	.90	.....	9 41	9.00	34.28	31.50
38575	Standard (Low Grade).....	Bel Air	1.06	1.00	.....	. ...	1.22	.50	9.01	8.00	22.49	20.20
	Superior Guano Co., Baltimore, Md.											
38686	Acid Phosphate 16%.....	Baltimore.....	.....	.....	.....	.....	.20	.....	17.19	16.00	25.83	24.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Superior Guano Co., Balto., Md.											
38520	Dissolved Bone	Baltimore	1.59	1.25	.....	.....	1.32	.....	10.28	10.00	$28 67	$25.00
38545	McKenney's Special Wheat Mix.	Baltimore	2.04	2.00	.....	.....	6.60	.....	11.75	10.00	36.59	31.00
38632	Price Mixture (Low Grade)	Baltimore	.68	.50	.....	.....	1.38	.....	10.59	10.00	21.38	19.00
38633	Special Mixture	Baltimore	.84	1.00	.....	.....	.62	.....	12.16	10.00	25.21	23.00
38678	Special Wheat & Grass (L. Gr.)	Baltimore	.....	.....	1.48	1.25	2.75	.....	8.52	10.00	22.21	22.50
	Swift & Co., Inc., Baltimore, Md.											
38685	Garden City Phosphate	Baltimore	.....	.....	.....	.....	1.28	.....	14.37	14.00	21.82	21.00
38521	Acid Phosphate 16%	Baltimore	.....	.....	.....	.....	2.15	.....	16.50	16.00	25.18	24.00
38556	Ammoniated Phosphate	Baltimore	1.01	1.00	.....	.....	.98	.....	10.43	10.00	24.12	23.00
38533	Bone Meal & Phosphate	Baltimore	1.23	1.00	.....	.....	7.88	.....	13.14	20.00	32.70	38.00
28465	Bone Meal & Phosphate	Mt. Airy (J.N.C.)	1.30	1.00	.....	.....	7.95	.....	13.55	20.00	33.91	38.00
38576	Cereal Fertilizer 1-9-0	Pocomoke City	1.74	1.00	.....	.....	1.15	....	9.18	9.00	28.15	21.50
38635	Clay Soil Special	Elk Ridge	1.83	2.00	.....	.....	.72	.....	13.40	12.00	35.03	34.00
38577	Corn Grower 1-7-0 (Low Grade)	Pocomoke City	1.42	1.00	.....	.....	2.00	.....	7.42	7.00	23.29	18.50
38636	Grain Fertillzer	Elk Ridge	.89	1.00	2.18	2.00	.78	.....	9.13	8.00	34.21	32.00
38522	Phosphate & Potash	Baltimore	.....	.....	1.76	2.00	1.62	.....	11.55	10.00	28.21	27.00
38687	Pulverized Sheep Manure (L.G.)	Baltimore	3.36	2.50	2.06	1.50	1.10	.....	2.92	1.50	44.06	31.25
38693	Red Steer Fertilizer	Elk Ridge	1.55	2.00	1.42	2.00	2.00	.....	10.43	8.00	37.37	40.00
38534	Reliable Grain Fertilizer	Baltimore	1.18	1.00	1.02	1.00	1.15	.....	9.07	8.00	29.63	26.00
38637	Special Corn Grower	Elk Ridge	1.66	2.00	.....	.....	1.38	.....	11.20	10.00	30.63	31.00
38546	Special Formula No. 2	Baltimore	1.11	1.00	.....	.....	.90	.....	12.25	11.00	27.62	24.50
38643	Special Phosphate & Potash	Baltimore	.....	.....	1.86	2.00	1.70	.....	10.40	10.00	27.10	27.00

38523	Wheat Grower Phos. & Potash..	Baltimore	.....	....	1.76	2.00	1.85	.....	12.96	12.00	30.37	30.00
	Tanner Hide & Tallow Co., Hagerstown, Md.											
38612	Animal Tankage	Hagerstown	6.38	5.00	.....	.....	*14.55	*12.00	.....	.....	59.77	47.20
38613	Bone Phosphate	Hagerstown	2.59	2.00	.....	.....	5.25	4.00	11.97	8.00	40.78	29.60
	H. S. Taveau & Co., Baltimore, Md.											
38557	Bone Mixture	Baltimore	1.48	1.00	1.08	1.00	.95	.....	10.16	9.00	33.94	27.50
38688	Dissolved S. C. Bone	Baltimore	....	.....	.....	.....	.68	.....	17.60	16.00	26.54	24.00
38677	Wheat & Grass	Baltimore	....	...	1.02	1.00	1.12	.....	11.34	11.00	23.35	22.50
	Thomas & Co., Frederick, Md.											
38697	Acid Phosphate	Gaithersburg	.....	.....	.....	.....	.15	.....	17.51	16.00	26.30	24.00
38615	Crop Grower (Low Grade)	Barnesville	1.13	1.00	.....	.....	.70	....	10.23	8.00	24.67	20.00
38547	Harvest Queen	Baltimore	1.08	1.00	.....	.....	2.68	.. ..	10.47	10.00	25.42	23.00
	W. B. Tilghman Co., Salisbury, Md.											
38578	Fish-Bone Phosphate Mixture	Salisbury	1.16	1 00	.....	.....	2.40	.....	12.26	11.00	28.63	24.50
38580	High Grade Early Truck Guano	Salisbury	4.73	5.00	.....	.....	.55	.....	9.01	8.00	51.58	52.00
38579	Mixture "B"	Salisbury	4.02	4.00	...	.....	.72	.....	10.52	9.00	48.23	45.50
38581	Special Potato Fertilizer	Marion	2.93	3.00	.....	.....	.98	.....	11.26	9.00	40.72	37.50
38582	Standard Fish Mixture	Princess Anne	2.35	2.00	.....	.....	1.02	.....	10.78	10.00	35.38	31.00
	J. E. Tygert Co., Phila., Pa.											
38658	Ammoniated Fertilizer	Bel Air	2.05	2.00	.....	.....	1.05	.....	10.52	10.00	32.60	31.00
38535	Neptune Fish Guano (LowGrade)	Baltimore	1.19	1.00	.88	1.00	.70	.....	7.80	7.00	26.78	24.50
	J. Tyson & Son, Frederick, Md.											
38616	Acid Phosphate	Middletown	.....	.....	.....	.....	.12	.....	17.48	16.00	26.24	24.00
38617	Ammoniated Super-Phosphate	Middletown	1.16	1.00	.....	.....	1.00	.....	10.35	10.00	25.21	23.00
38618	Half & Half (Low Grade)	Frederick	1.21	1.00	.....	.....	.68	.....	8.07	8.00	22.06	20.00
38619	Special Mixture (Low Grade)	Middletown	.80	.50	.....	.....	.52	.....	8.80	8.00	19.81	16.00
38620	XX High Grade Fertilizer	Frederick	2.02	2.00	.....	.....	.57	.....	9.44	9.00	30.55	29.50
	E. S. Valliant & Son, Church Hill, Md.											
38583	Acid Phosphate 16%	Church Hill	.....	.....	.....	.....	.12	.....	16.38	16.00	24.59	24.00
38524	Ammoniated Potash Mix. (L.G.)	Baltimore	.48	.25	.32	.25	.68	.....	11.02	10·00	22.56	18.50
38584	General Crop Grower	Church Hill	1.38	1.00	1.30	1.00	.95	.....	10.14	8.00	34.43	26.00
38525	Grain Grower (Low Grade)	Baltimore	.65	.50	.26	.25	.70	.....	9.57	10.00	21.40	20.50
38585	Peninsula Mixture (Low Grade)	Church Hill	.39	.25	.....	.....	.55	.....	9.49	9.00	17.58	15.50
38558	Special Mixture (Low Grade)	Baltimore	.31	.25	.....	.....	1.68	.....	10.02	10.00	18.18	17.00

*Total Phosphoric Acid.

No.	Name and Address of Manufacturer and Name of Fertilizer	Place of Sampling (and Senders initials when not Sampled by the College Agent.)	NITROGEN Calculated as AMMONIA.		POTASH. K_2O.		PHOSPHORIC ACID.				Comparative Value Per Ton Found.	Comparative Value Per Ton Guaranteed.
							Insoluble.		Available.			
			Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.	Found.	Guaranteed.		
	Virginia-Carolina Chemical Co.,	**Richmond, Va.**										
38670	Special Compound for Wheat...	Laurel.....	1.02	1.00	1.06	1.00	1.08	1.00	8.13	8.00	$27.15	$26.40
	S. L. Webster & Son, Cambridge,	**Md.**										
38586	Acid Phosphate High Grade....	Cambridge.....	.....	.....	.....	.....	.22	.....	16.95	16.00	25.47	24.00
38587	Special Make.....	Cambridge.....	1.01	1.00	.....	....	1.00	.....	11 78	10.00	26.15	23.00
	Westminster Fertilizer Co., Westminster, Md.											
38621	Governor.....	Westminster.....	1.76	1.50	.....	.....	1.20	.....	11.25	11.00	31.44	28.50
38622	Leader.....	Westminster.....	1.31	1.00	.....	.....	1.22	.....	9.84	10.00	25.73	23.00
38623	Super-A.....	Westminster.....	.72	1.00	.....	.....	.92	.....	10.36	9.00	21.67	21.50
	H. W. Whistler, Bel Air, Md.											
38588	Dissolved Bone.....	Bel Air.....	1.88	2.00	.....	.....	1.50	.....	10.69	10.00	31.68	31.00
38589	Fish Bone & Potash(LowGrade)	Bel Air.....	.63	.50	.36	.25	1.15	.....	8.16	8.00	19.90	17.50
	F. M. Wilson & Co., Pocomoke City,	**Md.**										
38590	Favorite Trucker.....	Pocomoke City.....	4.30	4.00	.....	.....	1.50	.....	11.54	10.00	52.31	47.00
	Robert A. Wooldridge Co., Balto.,	**Md.**										
626	Acid Phosphate High Grade....	Baltimore.....	.....	.....	.....	.....	.65	.....	17.09	16.00	25.77	24.00
679	American Potash Mixture	Baltimore.....	.....	.....	1.60	2.00	1.08	.....	10.02	10.00	24.85	27.00
680	Basic Lime Phosphate (L. Gr.).	Baltimore.....	.....	.....	.....	.....	3.70	1.00	12.16	13.00	18.98	19.70
591	Fidelity Phosphate.....	Perryman.....	2.08	2.00	.....	.....	.75	.....	10.76	10.00	33.08	31.00
526	Florida Acid Phosphate.....	Baltimore.....	.....	.....	.....	.....	.68	.....	14.56	14.00	21.98	21.00
650	Dissolved Animal Bone High Gr.	Baltimore.....	2.37	2.50	.....	.....	1.65	.....	12.07	12.00	37.73	38.00

38671	Farmers Fav. Cereal Comp. (L.G.)	Baltimore.....	.60	.50	1.06	1.00	.80	.....	9.07	8.00	25.09	22.00
38659	Fine Ground Bone..	White Hall	3.81	3.00	.....	.....	*25.76	*22.00	.....	.....	45.94	37.20
38689	Special Wheat & Grass..... ...	Baltimore.....	1.55	1.50	.....	.....	1.23	.....	10.56	10.00	28.73	27.00
38681	Triumph Brand Phosphate 1916.	Baltimore.....	1.57	1.50	1.06	1.00	.88	.....	10.44	10.00	34.93	33.00

*Total Phosphoric Acid.

Registrations for 1919. **(For Key See Page 22.)**

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Acme Guano Co.			
Special Amm'd Mix. (Low Grade)	1 DT NA	8 RT	0
Harvest King	1 "	10 "	0
Alexandria Fertilizer & Chemical Co.			
H. G. 16% Acid Phosphate		16	0
Rel. Amm'd Super. Phos. for C. & O.	1¼ TtAC	10 RB	0
Standard Amm'd Super Phosphate	2 TtAC	10 RB	0
Defiance Phosphate	1 TtAC	8 RB	1 A
Alphano Humus Co.			
Prepared Alphano Humus (Low Grade)	1¼ H	½ H	½ H
American Agricultural Chemical Co.			
14% Acid Phosphate	0	14	0
16% Acid Phosphate	0	16	0
Star Phos. with Potash (Low Grade)	0	10 R	1 A
Dissolved Phosphate and Potash	0	10 R	2 A
XXX Ammoniated Fertilizer	1½ TtbA	10 RB	0
Ammoniated Fertilizer (Low Grade)	2 "	8 "	0
Ammoniated Fertilizer AA	2 "	10 "	0
Ammoniated Superphosphate	2 "	12 "	0
Ammoniated Fertilizer AAA	3 "	10 "	0
Fish Fertilizer	2 FtbAT	10 "	0
Dead Shot Phos. 1916 (Low Grade)	½ Ttb	8 "	1 A
Special Complete Fertilizer	1 Ttb	8 "	2 A
Fish Guano 1916	1 FTtb	8 "	1 A
Wizard Phosphate (Low Grade)	½ Ttb	8 "	0
1–8–0 Amm'd Super. Phos. (Low Grade)	1 "	8 "	0
Ammoniated Fertilizer A	1 "	10 "	0
Sweepstakes Grain & Grass Mixture	1 "	12 "	0
Matchless Potash Manure	2 TtbA	8 "	2 A
3–8–3 Ammoniated Fertilizer	3 TtbA	8 "	3 A
4–8–0 Ammoniated Fertilizer	4 TtbDAN	8 "	0
Ammoniated Fertilizer AAAA	4 "	10 "	0
5–7–0 Ammoniated Fertilizer	5 "	7 "	0
High Grade Ammoniated Fertilizer	5 "	8 "	0
7–6–0 Ammoniated Fertilizer	7 "	6 "	0
Climax Top Dresser	5 N	8 R	0
Fine Ground Bone	3	22.88 *	.....
Raw Bone Meal	4	20.59 *	.....
Dissolved Animal Bone	2½	12	0
Special Bone Mixture	1½ B	12 RB	0
A. A. C. Co. (Canton)			
Eagle Phosphate (Low Grade)	1 Ttb	7 RB	1 A
Harrow Brand Crop Grower	1 "	8 "	1 A
Baker's Special Wheat, Corn & Grass Mixture 1916	1 "	9 "	1 A
Potato & Vegetable Manure 1916	1½ TtbA	10 "	1 "
Baker's Standard Guano 1916	2½ "	8 "	1 "
Baker's Fish Guano 1916	2 FTtbA	9 "	1 "
A. A. C. Co. (Detrick)			
Special Ammoniated Compound	1 Ttb	8 "	1 A
Corn & Oats Fertilizer 1916	1 "	9 "	1 "
Imperial Compound 1916	1 "	10 "	1 "
Royal Crop Grower 1916	2 TtbA	9 "	1 "
Kangaroo Komplete Kompound 1916	2 "	10 "	1 "
Quickstep Phosphate 1916	3 "	9 "	1 "
Gold Eagle 1916	3 "	9 "	1 "
5–8–0 Fertilizer	5 TtbDAN	8 "	0
7–8–0 Fertilizer	7 "	8 "	0
Gold Basis 1916	7 "	6 "	1 A
A. A. C. Co. (Lazaretto)			
Ammoniated Phosphate 1916	1 Ttb	8 "	1 A
Farmers Choice Brand 1916	1 "	9 "	1 "
Ammoniated Fertilizer A	1 "	10 "	0
Tomato Compound 1916	1½ TtbA	10 "	1 A
Crop Grower 1916	2 "	9 "	1 "
Retriever Animal Bone Fert. 1916	2¼ "	9 "	1 "
Farmers Reliable 1916	2 "	10 "	1 "
Spec. Tobacco & Potato Fert. 1916	3 "	9 "	1 "
A. A. C. Co. (Nickerson)			
Nickerson's Mix. 1916 (Low Grade)	½ Ttb	8 RB	1 A
A. A. C. Co. (Slingluff)			
10% Tob. Plant Bed Fert. 1916	10 TtbDAN	5 "	1 A

FIRM AND BRANDS	PER CENT AND SOURCES OF					
	Ammonia (or Nitrogen)		Phosphoric Acid Available		Potash Soluble	
A. A. C. Co. (Susquehanna)						
High Grade Superphosphate	.....		16		.....	
Crop Grower (Low Grade)	1	Ttb	7	RB	1	A
XXV Phosphate	1	"	8	"	1	"
Arrow Brand (Low Grade)	1	"	8	"	0	
Spec. Potato & Tob. Manure 1916	2	TtbA	9	"	1	A
Ammoniated Phosphate 1916	2	"	9	"	1	"
A. A. C. Co. (Zell)						
16% Acid Phosphate	.....		16		.....	
Little Treasure (Low Grade)	1	Ttb	7	RB	1	A
Economizer Phosphate 1916	1	"	8	"	1	"
Hustler Phosphate 1916	1	"	10	"	1	"
Ammoniated Superphosphate 1916	2	TtbA	9	"	1	"
Spec. Comp. for Pot. & Veg. 1916	3	"	9	"	1	"
A. A. C. Co. (Bowker Fertilizer Co.)						
16% Acid Phosphate	.....		16		.....	
Superphosphate with Ammonia 2%	2	TtbA	10	RB	0	
Amm'd O. I. O. Phos. (Low Grade)	¾	Ttb	10	"	0	
Superphosphate with Ammonia 1%	1	"	10	"	0	
Farm & Garden Phosphate 1916	2	TtbA	10	"	1	A
A. A. C. Co. (Josiah Cope & Co. Branch)						
High Grade Superphosphate	.....		16		.....	
Ammoniated Fertilizer AA	2	TtbA	10	RB	0	
Ammoniated Fertilizer AAA	3	"	10	"	0	
Fish Guano (Low Grade)	2	FTtbA	8	"	0	
Wheat & Grass Special	1	Ttb	8	"	1	A
Ammoniated Fertilizer A	1	Ttb	10	"	0	
Fish Phosphate (Low Grade)	½	FTtb	8	"	0	
A. A. C. Co. (W. F. Farmer & Co. Branch)						
Dissolved S. C. Phosphate	.....		14		.....	
High Grade Superphosphate	.....		16		.....	
All Crop Mixture No. 2	2	TtbA	10	RB	0	
All Crop Mixture No. 3	3	"	10	"	0	
General Crop Grower (Low Grade)	1	Ttb	7	"	1	A
Clyde Brand 1916	1	"	8	"	1	"
All Crop Mixture No. 1	1	"	10	"	0	
Harvest Queen 1916	1½	TtbA	10	"	1	A
Standard Phosphate 1916	2½	"	10	"	1	"
Anne Arundel Trucker 1916	5	TtbDAN	8	"	1	"
7% Guano	7	"	6	"	0	
Tobacco Bed Guano	10	"	5	"	0	
A. A. C. Co. (Pollock Fert. Co.)						
Dissolved S. C. Phosphate	.....		14		.....	
High Grade Superphosphate	.....		16		.....	
Ammoniated Fertilizer AA	2	TtbA	10	RB	0	
Ammoniated Fertilizer AAA	3	"	10	"	0	
Grain Special (Low Grade)	2	"	8	"	0	
Corn & Oats Spec. 1916 (Low Grade)	½	Ttb	8	"	1	A
Corn, Wheat & Tom. Guano 1916	1	"	8	"	1	"
War Brand (Low Grade)	½	"	8	"	0	
Our Brand Guano (Low Grade)	1	"	8	"	0	
Ammoniated Fertilizer A	1	"	10	"	0	
Spec. Potato & Tob. Fert. 1916	2½	TtbA	8	"	1	A
A. A. C. Co. (M. E. Wheeler & Co. Branch)						
Peerless Acid Phosphate	.....		14		.....	
High Grade Acid Phosphate	.....		16		.....	
Ammoniated Corn Phosphate	2	TtbA	10	RB	0	
Success Fertilizer (Low Grade)	½	Ttb	8	"	1	A
Royal Wheat Grower 1916	1	"	8	"	1	"
Special Tomato Fertilizer 1916	1	"	9	"	1	"
Banner Wheat Grower (Low Grade)	½	"	8	"	0	
General Crop Fertilizer	1	"	10	"	0	
Potato Fertilizer	2	TtbA	8	"	2	A
Fish Guano	5	TFtbDAN	8	"	0	
Wheat and Clover Fertilizer	.....		10	R	2	A
American Fertilizing Co.						
Grain Rel. Amm'd Form. (Low Grade)	½	tNCA	10	RB	0	
Special Fish Guano	1	"	10	"	0	
Champion Ammoniated Phosphate	2	"	10	"	0	
Fish and Bone Special	2	"	11	"	0	
Stable Manure Sub. Rev. (Low Grade)	3	"	7	"	0	

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
American Fertilizing Co.			
Eagle Ammoniated Compound	3 tNCA	10 RB	0
Truck and Vegetable Fertilizer	4 "	10 "	0
Truck Ammoniated Superphosphate	5 "	8 "	0
Special Formula (Low Grade)	½ "	8 "	1 AT
Reliable Guano	1 "	8 "	1 "
Fish and Bone Comp. Rev. 1916	2 "	8½ "	1 "
Special Formula (Low Grade)	½ "	8 "	2 "
Ammoniated Crop Compound	1 "	8 "	2 "
Eagle Crop Grower	2 "	8 "	2 "
Grain and Grass Grower	1 "	9 "	3 "
Fish and Bone Compound	2 "	8 "	3 "
Phosphate and Potash (Low Grade)	.....	10 R	1 "
Dissolved Phosphate and Potash	.....	10 "	2 "
Alkaline Mixture (Low Grade)	.....	8 "	3 "
High Grade Acid Phosphate	.....	16	.....
Acid Phosphate	.....	14	.....
12% Acid Phosphate (Low Grade)	.....	12	.....
8 and 7 Ammoniated Compound	7 tNCA	8 RB	0
Armour Fertilizer Works			
Star Phosphate	.....	14	.....
Acid Phosphate	.....	16	.....
Phosphate and Potash No. 1	.....	10 R	2 SAC
1–10–0	1 Ttb	10 RTb	0
1½–9–0 (Low Grade)	1½ TDAb	9 "	0
2–10–0	2 TtAb	10 "	0
3–10–0	3 TADt	10 RT	0
Wheat, Corn & Oats Spec. (Low Grade)	1 Ttb	7 RTb	1 AC
Crop Grower	1 Ttb	8 "	2 SAC
Grain Grower	2 TtAb	8 "	2 SAC
5–8–0	5 ADTt	8 RT	0
10–5–0	10 ADT	5 "	0
Bone Meal	3	22.00 *	.....
Raw Bone Meal	4½	21.50 *	.....
Tuscarora Brands			
Acid Phosphate 14%	.....	14	.....
Acid Phosphate 16%	.....	16	.....
Phosphate and Potash	.....	10 RR	2 SAC
1–10–0	1 Ttb	10 RTb	0
1½–9–0 (Low Grade)	1½ TDAb	9 "	0
2–10–0	2 TtAb	10 "	0
3–10–0	3 TtAD	10 RT	0
Ammoniated Phosphate (Low Grade)	1 Ttb	7 RTb	1 AC
Crop Grower	1 Ttb	8 "	2 SAC
Standard	2 TtAb	8 "	2 SAC
Animal Bone	3	22.00 *	.....
Raw Bone Meal	4½	21.50 *	.....
Baltimore Fertilizer Co.			
Honest Trucker	5 NATt	8 RT	1 AmC
Ammoniated Bone	2 "	8 "	2 "
Crop Grower	1 "	8 "	1 "
Potato Grower (Low Grade)	2 "	8 "	½ "
7% Guano	7 "	6 "	0
Wheat and Grass Grower	2 "	10 "	0
Old Honesty (Low Grade)	1 "	8 "	0
16% Acid Phosphate	.....	16	.....
Baltimore Pulverizing Co.			
Truckers Choice	3 DTNA	8 RT	1 A
Royal Compound	2 "	8 "	1 "
Special Potato Mixture	2 "	7 "	1 "
Harvest Queen	1 "	10 "	1 "
Spec. Spring & Fall Mix. (Low Grade)	.....	8 "	1 "
Barrett Co.			
Arcadian Sulphate of Ammonia	25¼	0	0
Baugh & Sons Co.			
Raw Bone Meal Warranted Pure	4	18.30 *	.....
Pure Dissolved Animal Bones	2½	13	0
Pure Steamed Bone	2	25.00 *	.....
Half and Half Mixture	1½B	12 RB	0
16% Acid Phosphate	.....	16	.....
14% Acid Phosphate	.....	14	.....

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Baugh Sons & Co.			
Soluble Alkaline Superphosphate	.....	10 R	2 MA
Phosphate and Potash Mixture	.....	12 "	1 "
Nitrate of Soda	18½	0	0
Tri-Unit Potato Guano	5 BDTA	8 BTR	3 MA
Peruvian Guano Substitute	5 "	8 "	1 "
Standard Potato Grower	4 "	8 "	1 "
Grand Rapid Guano	3 "	9 "	1 "
Durable Plant Food	2 "	8 "	2 "
Complete Animal Base Fertilizer	2 "	10 "	1 "
Special Potato Manure	2 "	10 "	1 "
Tomato Compound	2 "	10 "	1 "
Special Vegetable Compound	1 "	9 "	3 "
General Crop Grower	1 "	8 "	1 "
5% Trucker	5 BDTA	8 "	0
Truckers Favorite	3 "	10 "	0
Old Standby Dis. Animal Base	2 "	12 "	0
Corn and Oats Fertilizer	2 "	10 "	0
Peninsula Grain Producer (Low Grade)	1 "	9 "	0
H. G. Ammoniated Animal Base	4 "	10 "	0
Beckley Fertilizer Co.			
Bone Mixture	1½ TtA	14 RT	0
Crop Grower	1 ANCt	12 R	0
Fish Bone Compound	1½ FCt	10 R	0
Dissolved Phosphate	.....	16	.....
Berg Company			
Bone and Meat	4	17.00 *	.....
Spec. Bone Man.with't Pot.(Low Grade)	2.43	7	0
Raw Bone Fine	3.64	22.00 *	.....
3 and 50 Bone	3.00	23.00 *	.....
C. H. Braun Sons			
Special	3 NTB	10 RBT	0
Bone Tankage	6	13.00 *	.....
Chesapeake Chemical Co.			
7–9–0 Fertilizer	7 NAT	9 R	0
7–6–2 "	7 "	6 R	2 Aa
5–8–3 "	5 "	8 R	3 "
5–6–0 "	5 "	6 R	0
Favorite Producer	3 "	10 R	0
Grangers Phosphate	2 NAT	10 R	0
National Crop Grower	2 "	8 R	2 "
1–8–3 Fertilizer	1 t	8 R	3
1½–8–0 Fertilizer (Low Grade)	1½ t	8 R	0
Buyers Favorite	1 t	10 R	0
Money Producer	1 t	8 R	1 "
Gem Phosphate (Low Grade)	1 t	8 R	0
¼–7–2 Fertilizer (Low Grade)	¼ t	7 R	2 "
½–7–0 Fertilizer (Low Grade)	½ t	7 R	0
Alkaline 12–1	.....	12 R	1 "
Alkaline 10–2	.....	10 R	2 "
16% Dissolved Phosphate	.....	16	.....
14% Dissolved Phosphate	.....	14	.....
Pure Raw Bone	4½	22.50 *	.....
Eastern Shore Special	5 NAT	8 R	0
Chicago Feed & Fertilizer Co.			
Magic Br. Pul. Sheep Man.(Low Grade)	2¼ m	1½m	1¼m
Columbia Guano Co.			
14% Acid Phosphate	.....	14	.....
High Grade 16% Phosphate	.....	16	.....
All Amer. Potash Mix. (Low Grade)	.....	10 R	1 A
Jack Tar Potash Mixture	.....	10 R	2 A
Old Guard Potash Mixture	.....	12 R	1 "
Searchlight Potash Mixture	.....	12 R	2 "
C. & O. Amm'd Phos. (Low Grade)	1 FT	8 R	0
Reflex Ammoniated Phosphate	1 "	10 R	0
Vitalic Amm'd Phos. (Low Grade)	2 AFT	8 RA	0
Duplex Ammoniated Phosphate	2 "	10 "	0
Deluxe Ammoniated Phosphate	2½ "	12 "	0
Logical Ammoniated Phosphate	3 "	10 "	0

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Columbia Guano Co.			
Hornbill Ammoniated Phosphate	4 AFT	8 RA	0
Big Crop Ammoniated Phosphate	5 "	8 "	0
Restorer Ammoniated Phosphate	6 "	8 "	0
7% Ammoniated Phosphate	7 "	6 "	0
Saki 7% Ammoniated Phosphate	7 "	8 "	0
Goodwill Guano	1 FT	8 "	1 A
Growmore Guano	2 AFT	8 "	1 "
Special Grain Guano	1 FT	8 "	2 "
Soluble Guano	2 AFT	8 "	2 "
Fish, Phosphate and Potash Guano	2 "	8 "	3 "
Titantic Guano	3 "	8 "	3 "
Clarion Guano	4 "	8 "	3 "
Fine Ground Bone Meal	3	22.90 *	.....
Pure Raw Bone Meal	4½	21.50 *	.....
Central Chemical Co.			
Special Bone Mixture	2 TtNA	10 R	0
Fish Bone Compound	1½ FTN	10 "	0
Superior	1 TtN	12 "	0
Dissolved Bone Compound	2¼ TN	13 RT	0
Dissolved Phosphate	.....	16	.....
Dissolved Phosphate	.....	14	.....
Acme Brand (Low Grade)	1 TtN	8 R	0
Pride of the Valley	1 "	10 "	0
Bone Compound	1½ TtA	14 TR	0
Golden Sheaf	1 TtN	8 R	1 A
Bone Mixture	2 tAN	8 R	2 "
L. B. P. Dennis & Son			
Special Round Potato Mixture	5 FNAb	8 RFb	0
Potash Potato Mixture	5 "	7 "	3 A
No. 1 Fish Mixture	3 "	8 "	0
Fish Mixture No. 2 (Low Grade)	2 "	8 "	0
2–10–Mixture	2 "	10 "	0
Klondike Fish Mixture	1 "	10 "	0
Downing Phoschate Co.			
Bone Valley Pul. Untreated Phos	.....	30.00 **	.....
Farmers Fertilizer and Feed Co.			
Farmers Best	2 DTt	11 R	0
No. 2 Bone Phosphate	2 "	9 "	0
No. 3 Bone Phosphate (Low Grade)	1½ "	8 "	0
XX Bone Phosphate (Low Grade)	1 "	9 "	0
Indian Chief	1 "	11 "	0
Acid Phosphate	.....	16	.....
Farmers and Planters Co.			
High Grade 7%	7 NFTb	6 Rb	0
Early Vegetable	5 "	8 "	0
Truckers Mixture	3½ "	9 "	0
Special Fish Mixture	2½ "	9 "	0
Fish Mixture	2 Fb	10 "	0
General Crop Grower	1 "	11 "	0
Peerless (Low Grade)	½ "	10 "	0
High Grade Acid Phosphate	.....	16	.....
Fertile Chemical Co.			
Nitro-Fertile (Low Grade)	2.43 N	3 R	3 M
Charles A. Green			
Standard Fertilizer	2 TN	10 RTB	0
Sweet Potato Fertilizer	2 "	8 "	3 A
Early Truck and Tomato Fertilizer	4 "	10 "	0
Griffith & Boyd Co.			
Blood, Bone and Potash	5 NDTAb	8 TR	1 A
Truckers Stable Manure (Low Grade)	3½ "	5 "	1 "
Fish Bone and Potash (Low Grade)	1¾ NFTb	7 RFT	1 "
Farmers Potato and Tomato	1½ NTb	8 RT	1 "
Royal Potash Guano	1 NTb	8 "	1 "
Peerless Fertilizer (Low Grade)	½ bT	8 "	1 "
Blood and Bone Mixture	4 NDTAb	9 "	0
Farmers Bone Mixture	2 NTAb	9 "	0
Fish and Bone Mixture (Low Grade)	1¾ NFTb	7 RFT	0
Peerless Mixture (Low Grade)	½ bT	8 RT	0
Harvest Queen Phosphate	1 NTb	9 "	1 A
Vegetable Bone	3 NDATb	8 "	1 "

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Griffith & Boyd Co.			
Queen Guano (Low Grade)	1 NTb	9 RT	0
Cereal Plant Food	1 NTb	8 "	1 A
Grain and Grass Grower	2 NTAb	12 "	0
Farmers Gem	1 NTb	10 "	0
Dissolved Animal Bone	2½	10	0
High Grade 16% Acid Phosphate	.....	16	.....
Acid Phosphate	.....	14	.....
Special Grain Grower	.....	10 R	2 A
Alkaline Mixture (Low Grade)	.....	10 "	1 "
Pure Fine Ground Bone Meal	4	20.00 *	.....
Soft Ground Bone Meal	3	11.00 *	.....
Griffith & Turner Co.			
Amm'd Butchers Bone Phosphate	1¼ NT	9 RT	1 A
Amm'd Alkaline Plt. Food (Low Grade)	1 NT	6½ "	1 "
Animal Bone Phosphate	2 ANT	9 "	1 "
Hampstead Fertilizer Co.			
1 and 10	1 NA	10 RT	0
1–8–2	1 "	8 "	2 AC
S. M. Hess & Bro., Inc.			
Amm'd Spec. Fert. (Low Grade)	½ Ttb	8 RB	0
Amm'd Grain Grower (Low Grade)	1 "	8 "	0
Standard Super Phosphate	1 "	10 "	0
Keystone Phosphate	1 "	8 "	1 A
Special Corn Manure 1916	1 "	9 "	1 "
Wheat and Grass Manure 1916	1 "	9 "	1 "
Farmers Gen. Fertilizer 1916	1 "	10 "	1 "
Potato Crop Grower (Low Grade)	2 ATtb	8 "	0
Superior Super Phosphate	2 "	10 "	0
Reliable Super Phosphate	3 "	10 "	0
Big Crop Fertilizer 1916	2 "	10 "	1 A
Potato Manure 1916	3 "	9 "	1 "
Market Gardeners Manure	5 TtbDAN	8 "	0
Strawberry and Potato Grower	7 "	6 "	0
Special Potato Manure 1916	4½ "	8 "	1 A
Special H. G. Fertilizer 1916	10 "	5 "	1 "
Fish and Potash Manure 1916	2 FTtbA	9 "	1 "
Acid Phosphate (Low Grade)	.....	12	.....
Acid Phosphate	.....	14	.....
Special H. G. Acid Phosphate	.....	16	.....
Wm. H. Hood			
Special Mixture	1 TBN	10 RB	0
Horsey, Roe & Co.			
3–12	3 NT	12 R	0
2–10	2 "	10 "	0
Acid Phosphate 16%	.....	16	.....
Hubbard Fertilizer Co.			
7–6–2 Fertilizer	7 NAT	6 R	2 A
Special Guano	7 "	9 "	0
5–8–3 Fertilizer	5 "	8 "	3 "
5–6–0 Fertilizer	5 "	6 "	0
Ammoniated Fertilizer	3 "	10 "	0
Excelsior Mixture	2 "	10 "	0
Farmers IXL	2 "	8 "	2 "
Oriental Guano	1 T	10 "	0
1–8–3 Fertilizer	1 "	8 "	3 "
English Compound	1 "	8 "	1 "
Columbia Phosphate (Low Grade)	1 "	8 "	0
½–7–0 Fertilizer (Low Grade)	½ "	7 "	0
¼–7–2 Fertilizer (Low Grade)	¼ "	7 "	2 "
Alkaline 12–1	.....	12 "	1 "
Phosphate and Potash	.....	10 "	2 "
16% Phosphate	.....	16	.....
14% Phosphate	.....	14	.....
Pure Raw Bone	4½	22.50 *	.....
Eastern Shore Special	5 NAT	8 R	0
M. P. Hubbard Co., Inc.			
Dissolved Phosphate	.....	16	.....
Big Jim Compound (Low Grade)	½ TANFB	8 RBT	1 A
Good and Cheap Compound	1 "	8 "	1 "
Ever-Ready Compound	1 "	10 "	0

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
M. P. Hubbard Co., Inc.			
Great Harvest	2 TANFB	10 RBT	0
Celebrated	2 "	8 "	2 A
Animal Fish and Ammonia Compound	3 "	8 "	2 "
Excelsior	1 "	8 "	2 "
Lakeland Phosphate Co.			
Natursown Pulz. Phos. Rock	.....	32 **	.....
Listers Agricultural Chemical Co.			
Buyers Choice Acid Phosphate	.....	14	.....
High Grade Acid Phosphate	.....	16	.....
Plant Food 1916	1 Ttb	10 RB	0
Crescent Amm'd Superphosate 1916	2 ATtb	10 "	0
Excelsior Guano 1916	3 "	10 "	0
Super Amm'd Superphosate 1916	4 TtbDAN	10 "	0
Atlas Brand Fertilizer 1916	5 "	8 "	0
Golden Sheaf 1916 (Low Grade)	½ Ttb	8 "	1 A
Special Crop Producer 1916	1 "	8 "	1 "
Squirrel Brand Fertilizer 1916	1 "	8 "	1 "
Valley Brand Fertilizer 1916	1 "	10 "	1 "
Fish Brand Fertilizer	1½ ATtb	10 "	0
Harvest Queen Phosphate 1916	1½ "	10 "	1 A
Corn and Potato Fertilizer 1916	2½ "	8 "	1 "
Standard Pure Superphosate 1916	3 "	9 "	1 "
Perfect Potato Manure 1916	4 TtbDAN	9 "	1 "
5–7–1 Fertilizer	5 "	7 "	1 "
7–6–0 Fertilizer	7 "	6 "	0
Raw Bone Meal	4½	21.51 *	.....
Fine Ground Bone	3	22.88 *	.....
Cel. Gr. Bone and Tank. Acid	3¼	7	0
Special Tobacco Fertilizer 1916	2½ ATtb	10 BR	1 A
Grain and Grass Fertilizer 1916	.....	10 R	2 "
7–8–0 Fertilizer	7 TtbDAN	8 RB	0
1½–8–4 Fertilizer	1½ ATtb	8 "	4 "
2–8–3 Fertilizer	2 "	8 "	3 "
Special Bone Mixture	1½ B	12 "	0
Massey & Kilbourne			
Trustworthy	2 NT	10 RA	0
Propagator (Low Grade)	2 "	8 "	0
Tomato Phosphate	1 "	9 "	3 A
High Grade Acid Phosphate	.....	16	.....
Wheat Phosphate (Low Grade)	1 T	9 "	0
Medford Fertilizer Works			
No. 1	1 t	10 R	0
No. 2	1 t	8 "	1 C
No. 3	2 DT	12 "	0
F. Mehring Works, Inc.			
Truckers Joy	4 TN	9 RT	0
Sure Grain Grower	1¼ B	15 RB	0
Big 4 Crop Grower	1 TNA	9 "	2 A
Miller Fertilizer Co.			
No. 1 A. D. Bone	2 ANTt	8 RB	2 A
Standard Phosphate	3 ANDTt	8 "	1 "
Ammoniated Dis. Bone (Low Grade)	1¾ ANt	8 "	½ "
Potato and Vegetable Grower	2 ANTt	8 "	1 "
No. 1 Hustler Phosphate	1 tAN	8 "	1 "
Special Tobacco Grower	2 ANTt	7 "	1 "
Harvest Queen (Low Grade)	1¾ ANt	8 "	¾ "
Hustler Phosphate (Low Grade)	1 tAN	8 "	½ "
Club Brand (Low Grade)	½ "	8 "	½ "
W. G. Phosphate (Low Grade)	½ "	7 "	½ "
No. 1 Special	2 ANTt	10 "	0
No. 2 Special (Low Grade)	1¼ ANt	8 "	0
Pimlico	3 ANDTt	8 "	0
Farmers Profit (Low Grade)	1¾ ANt	9 "	0
M. B. S. Low Grade)	¾ tAN	7 "	0
Acid Phosphate	.....	14	.....
Acid Phosphate	.....	16	.....
Natural Guano Co.			
Sheeps' Head Pulv. Sheep Man. (L. Gr.)	2.73	1	1½
J. B. Nichols & Son			
Farmers' Friend Fertilizer	4 NT	7 TR	1 N

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Nitrato Agencies Co.			
Nitrate of Soda	18¼	.....	.....
Acid Phosphate	.....	16	.....
High Grade Ground Tankage	10	4.57 *	.....
Ground Bone	3	22.88 *	.....
Ground Tankage	7	6.86 *	.....
Dried Blood	16	.....	.....
G. Ober & Sons Co.			
Sunbeam Guano	2 TANF	10 TFR	0
Electro Compound	1 "	10 "	0
Independent Amm'd Super Phos	1 "	8 "	1 NSM
High Grade Acid Phosphate	.....	16	.....
Royal Fish and Potash Compound	2 TANF	9 "	1 NSM
Farmers' Mixture	1 "	9 "	2 "
Sol. Amm'd Super Phos. Lime	2 "	8 "	2 "
Liberty Fish Guano	1¼ "	13 "	0
Dissolved Phosphate	.....	14	.....
Avondale Amm'd Dissolved Bone	2 TANF	8 "	1 N
Golden Seal Tobacco Guano	3 TANFD	8 "	1 "
Md. Pride Tob. Bed Guano 6%	6 TANF	6 "	0
Special Tobacco Bed Fertilizer 10%	10 "	4 "	0
Vegetable and Truck Compound	4 "	8 "	2 "
Fish Bone Mixture	3 "	9 "	0
Special Tobacco and Truck Guano	4 "	8 "	0
Special Plant Food	2 "	9 "	5 "
Stag Guano	1 "	8 "	4 "
Pure Bone Meal	3	22.00 *	.....
Pure Raw Bone Meal	4½	21.00 *	.....
Dissolved Animal Bone	3	10	0
Edelen's Wheat and Grain Mixture	1 TANF	8 TFR	1 "
" Special Tobacco Guano	3 TANFD	8 "	1 "
" High Grade Tobacco Guano	4 TANF	6 "	1 "
" Special Tob. Bed Fert. 10%	10 "	4 "	0
Patapsco Guano Co.			
10% Acid Phosphate (Low Grade)	.....	10	.....
Pure Dissolved S. C. Phosphate	.....	14	.....
High Grade Acid Phosphate	.....	16	.....
Farmers' Delight (Low Grade)	1 tTb	8 RB	0
Ammoniated Compound	1 "	10 "	0
Fish Mixture (Low Grade)	2 AtbF	8 "	0
Golden Crop Fertilizer 1916	2 "	10 "	0
Blood, Bone and Potash (Low Grade)	½ Ttb	8 "	1 A
General Crop Prod. (Low Grade)	1 "	7 "	1 "
Money Maker 1916	1 "	8 "	1 "
Plant Food with Potash	1 "	8 "	2 "
Corn and Tomato Fertilizer 1916	1½ ATtbF	10 "	1 "
Fish Guano 1916	2 "	8½ "	1 "
Special Potato Manure 1916	2 "	10 "	1 "
Tobacco and Potato Fertilizer 1916	2½ "	8 "	1 "
Columbian Guano 1916	3 "	9 "	1 "
Early Trucker	5 TtbDAN	7 "	5 "
Battle Ax Phosphate (Low Grade)	.....	12	.....
Sea Gull Guano	1 Ttb	8 "	1 A
Coon Brand Guano 1916	1 "	9 "	1 "
Grange Mixture 1916	2 ATtbF	9 "	1 "
Baltimore Soluble Phosphate	.....	11 R	2 "
Pure Raw Bone	4½	21.51 *	.....
Peerless Fertilizer Co.			
Club Mixture (Low Grade)	½ t	8 RT	0
Wheat and Clover (Low Grade)	1 t	8 "	0
Old Reliable (Low Grade)	1 t	8 "	0
Fish Mixture (Low Grade)	2 FN	8 RF	0
American Standard	4 "	6 "	1 A
Piedmont-Mt. Airy Guano Co.			
16% Acid Phosphate	.....	16	.....
Economy (Low Grade)	¼ Tt	10 RT	0
Peerless Phosphate (Low Grade)	1 TtA	8 "	0
Special Crop Grower	1 "	10 "	0
Fish Guano	2 TtAF	10 "	0
Levering's Standard	2 ACNB	8 "	0
Levering's Excelsior	1 Tt	8 "	1 A

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Piedmont–Mt. Airy Guano Co.			
Raw and Dissolved Bone	3	15	.....
Standard Dissolved Bone Phosphate	1 Tt	10 RB	.....
Utility Fertilizer	2 ATt	10 "	.....
Pocomoke Guano Co.			
Seaboard Popular Trucker	7 NAFT	6 R	5 A
Standard Truck Guano	5 "	7 "	5 "
7–8–0 Fertilizer	7 "	8 "	0
5–8–0 Fertilizer	5 "	8 "	0
Ramsburg Fertilizer Co.			
Excelsior Plant Food	2 TBD	10 RB	0
Old Virginia Compound	1 TB	8 "	1 A
Ammoniated Bone Phosphate	1 "	11 "	0
William's Wheat and Grass Fert	1 "	10 "	0
Queen (Low Grade)	½ t	10 R	0
Super Phosphate	.....	16	.....
Rock, Salt and Plaster (Low Grade)	.....	5½ R	.....
Rasin–Monumental Co.			
Royal Superphos. (Low Grade)	½ tNCA	8 RB	0
Royal Amm'd Superphos. (Low Grade)	½ "	10 "	0
Special Fish Mixture	1 "	10 "	0
Special Grain Formula	1¼ "	10 "	0
Special Crop Preparation	2 "	10 "	0
Special Fish and Bone Guano	2 "	11 "	0
Empire Superphosphate	3 "	10 "	0
Potato and Vegetable Fertilizer	4 "	8 "	0
Truck Amm'd Superphosate	5 "	8 "	0
7% Potato Guano	7 "	8 "	0
Royal Manure (Low Grade)	½ "	8 "	1 AT
Emerg. Roy. Fish Bone and Potash	2 "	8½ "	1 "
Wheat, C. & O. Mix. (Low Grade)	½ "	8 "	2 "
United Grain Grower	1 "	8 "	2 "
Empire Guano	2 "	8 "	2 "
Capital Crop Compound	1 "	9 "	3 "
Royal Fish, Bone and Potash	2 "	8 "	3 "
Phos. and Pot. Revis. (Low Grade)	.....	10 R	1 "
Phosphate and Potash Fertilizer	.....	10 "	2 "
Special Alkaline Mix. (Low Grade)	.....	8 "	3 "
16% Acid Phosphate	.....	16	.....
Acid Phosphate	.....	14	.....
Seawall Special (Low Grade)	.....	10	.....
Wm. Penn Crop Grower	1 tNCA	8 RB	1 AT
Reindollar Co.			
Ammoniated Phosphate	2 NT	12 R	0
Rock and Potash	.....	12 R	2 K
Acid Phosphate	.....	16	.....
W. E. Robinson & Co.			
Vegetable and Grain	2 ATtN	8 RT	1 A
F. S. Royster Guano Co.			
14% Acid Phosphate	.....	14	.....
H. G. 16% Acid Phosphate	.....	16	.....
Old Glory Pot. Mixt. (Low Grade)	.....	10 R	1 A
Cloverdale Potash Mixture	.....	10 "	2 "
Yankee Potash Mixture	.....	12 "	1 "
Harmony Potash Mixture	.....	12 "	2 "
C. & O. Amm'd Phos. (Low Grade)	1 FT	8 RA	0
Royal Blue Amm'd Phosphate	1 "	10 "	0
Prime Fish Amm'd Phos. (Low Grade)	2 AFT	8 "	0
Penguin Ammoniated Phosphate	2 "	10 "	0
Flamingo Ammoniated Phosphate	2½ "	12 "	0
Innovation Ammoniated Phosphate	3 "	8 "	0
Defender Ammoniated Phosphate	4 "	8 "	0
Apollo Spec. Truck Amm'd Phos	5 "	8 "	0
Criterion Ammoniated Phosphate	6 "	8 "	0
7% Ammoniated Phosphate	7 "	6 "	0
Alaska Ammoniated Phosphate	7 "	8 "	0
Bee Line Spec. Truck Amm'd Phos	10 "	6 "	0
Cuckoo Crop Guano	1 FT	8 "	1 A
Wheat, Oats and Barley Guano	1 "	8 "	2 "
Wonder Worker Guano	1 "	8 "	3 "
Rational Guano	1 "	8 "	4 "

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
F. S. Royster Guano Co.			
Fish and Potash Guano	2 AFT	8 RA	1 A
Dreadnought Guano	2 "	8 "	2 "
Fish, Flesh and Fowl Guano	2 "	8 "	3 "
Bangup Guano	2 "	8 "	5 "
True Blue Guano	4 "	8 "	3 "
Angelus Truck Guano	5 "	8 "	3 "
Fine Ground Bone Meal	2	22.90 *	.....
Pure Raw Bone Meal	4½	21.50 *	.....
Scott Fertilizer Co.			
Sure Growth Compound	4 TFN	10 R	1 A
Victory Brand	2 TtA	8 "	3 "
Ammoniated Superphosate	4 FNT	10 "	0
Potato Grower	2 DAT	10 "	1 "
Sure Growth Superphosphate	2 TtA	8 "	1 "
Penna. Potato Grower	1 AT	8 "	2 "
Ammoniated Base	2 TAD	12 "	0
Crop Grower (Low Grade)	2 ADt	8 "	0
Wheat and Grass Grower (Low Grade)	½ T	10 "	1 "
Special Grain Grower	1 TD	10 "	0
Soluble Phosphate and Potash	.....	12 "	2 "
Tip Top Soluble Phosphate	.....	16	.....
Tip Top Soluble Phosphate	.....	14	.....
Pure Ground Raw Bone	4½	21.00 *	.....
Pure Bone Meal	3	23.00 *	.....
Standard Guano Co.			
Farmers' Reliance	6 TDN	10 R	0
Wm. H. Streett & Co.			
Ammoniated Dissolved Bone	1½ ANt	9 RB	1 A
Animal Compound	2½ ANTt	10 "	0
Superior Guano Co.			
Acid Phosphate	.....	16	.....
Corn and Grass (Low Grade)	.....	8 R	1¼ a
Half and Half (Low Grade)	.....	8 "	1¼ "
Ammoniated Dissolved Bone	1¼ BT	10 RB	0
Fish Mixture	2 FTA	10 RFT	0
Corn and Tomato (Low Grade)	½ T	8 RT	1 aC
Crop Producer	1 "	8 "	1 "
Ammoniated Phosphate and Potash	1 "	8 "	2 "
Big Crop Grower	2 TNA	8 "	2 aA
Bone Blood and Potash	5 TFNADB	8 TFRB	1 A
Swift & Co.			
Red Steer	2 NAT	8 RB	2 ACS
Grain Fertilizer	1 "	8 "	2 "
Reliable Grain Fertilizer	1 "	8 "	1 "
Wheat Grower Phosphate and Potash	.....	10 "	2 "
Special Corn Grower	2 NAT	10 "	0
Diamond "C" Grain Fert. (Low Grade)	1 "	8 "	0
Ammoniated Phosphate	1 "	10 "	0
Truck and Vegetable Fertilizer	2 "	8 "	1 "
Farmers' Favorite Fertilizer	2 "	9 "	1 "
Special Top Dresser	10 "	5 "	0
Special Truck Fertilizer	5 "	8 "	0
High Grade Acid Phosphate	.....	16	.....
Garden City Phosphate	.....	14	.....
Bone Meal Fertilizer	3	24.00 *	.....
Bone Meal and Phos. Fertilizer	1	13	0
Trucking Compound	7 NAT	6 RB	0
Virginia Potato Grower	5 "	7 "	0
Early Potato Grower	5 "	8 R	5 ACS
Complete Trucker	5 "	7 "	3 "
Corn and Grain Grower (Low Grade)	1 "	7 "	0
Trucking Compound	7 "	6 "	0
Special Truck Grower	3 "	8 "	3 "
Standard Potato Fertilizer	2 "	8 "	3 "
Special Diamond "A" Fertilizer	3 "	8 "	0
Seven Eight-Five Brand	7 "	8 "	5 "
Top Dresser Form No. 1	7 "	8 "	0
Top Dresser Form No. 4	7 "	8 "	3 "
Special Formula	5 "	8 "	3 "
High Grade Trucker	7 "	6 "	3 "

FIRM AND BRANDS	PER CENT AND SOURCES OF					
	Ammonia (or Nitrogen)		Phosphoric Acid Available		Potash Soluble	
Swift & Co.						
Truck and Potato Fertilizer	4	NAT	8	R	0	
Wheat and Rye Grower (Low Grade)	2	"	8	"	0	
Southern Trucker	5	"	7	"	2	ACS
Tanner Hide & Tallow Co.						
Bone Phosphate (Low Grade)	2	T	7	TR	0	
Animal Tankage	5		12.00	*	.....	
H. S. Taveau & Co.						
Strawberry Top Dressing	4	N	5	R	1	A
Sweet Potato Manure	2	AFTb	9	RB	1	"
Special Compound	2	"	10	"	0	
Pride of Maryland	1	FTb	10	"	1	"
Pride of Virginia	1	FTb	8	RB	1	"
Wheat, Corn and Oats	.....		11	R	2	"
Allerton Guano	1	TFb	8	RB	2	"
Bone Compound	1	"	10	"	0	
Florida Phosphate	.....		14		.....	
I. P. Thomas & Son Co.						
Wheat and Corn	2	FTN	10	TFR	0	
Tip Top Fertilizer	3	"	8	"	1	CA
Thomas & Co.						
Harvest Queen	1¼	Tb	10	Rb	0	
Crop Producer (Low Grade)	1	"	8	"	0	
Plant Food (Low Grade)	1	"	9	"	0	
Blood and Bone	2	"	10	"	0	
W. B. Tilghman Co.						
Spec. Mixt. for C. & C. (Low Grade)	.33	tm	13	R	0	
Fish, Bone and Potash	1	FtB	10	RF	2	A
Standard Fish Mixture	2	FNt	10	"	0	
Special Tomato Mixture	2	"	8	"	3	"
Special Potato Fertilizer	3	"	9	"	0	
Sweet Potato Potash Mixture	3	"	8	"	3	"
Mixture "B"	4	FNAt	9	"	0	
Potash "B"	4	"	8	"	3	"
H. G. Early Truck Guano	5	FNADt	8	"	0	
Early Truck Potash Mixture	5	"	8	"	3	"
Special 6–8–2 Fertilizer	6	"	8	"	2	"
7%	7	"	6	"	0	
Special Topdressing	6	N	0		0	
High Grade Acid Phosphate	.....		16		.....	
Dry Ground Fish	11		0		0	
Acidulated Fish Scrape	8		0		0	
Nitrate of Soda	18		0		0	
J. E. Tygert Co.						
14% Acid Phosphate	.....		14		.....	
16% Acid Phosphate	.....		16		.....	
Dissolved Phos. and Pot. (Low Grade)	.....		10	R	1	A
Soluble Phosphate and Potash	.....		10	"	2	"
Pawnee Phosphate (Low Grade)	1	Ttb	8	RB	0	
Ammoniated Fertilizer A	1	"	10	"	0	
Ammoniated Fertilizer AA	2	ATtb	10	"	0	
Ammoniated Fertilizer AAA	3	"	10	"	0	
Great Advancer Phosphate 1916	4	TtbDAN	10	"	0	
7–6–0 Fertilizer	7	"	6	"	0	
Prolific Phosphate 1916 (Low Grade)	½	Ttb	8	"	1	A
Neptune Fish Comp. 1916 (Low Grade)	1	FTtb	7	"	1	A
Golden Harvest Phosphate 1916	1	Ttb	8	"	1	A
Standard Fertilizer	2	ATtb	8	"	2	A
E. S. Valliant & Sons						
Acid Phosphate	.....		14		.....	
Acid Phosphate	.....		16		.....	
Winner	1	tNA	10	RB	0	
Tomato (Low Grade)	2	"	8	"	0	
Favorite	2	"	10	"	0	
Royal	3	"	8	"	0	
Crop	1	"	8	"	1	MN
Wm. H. Valliant & Bro.						
Crab Phosphate (Low Grade)	2	Fc	2	R	0	
Fish Mixture (Low Grade)	2	"	5	"	0	
Tomato Grower (Low Grade)	1	"	8	"	0	
Wheat Special (Low Grade)	½	"	8	"	0	

FIRM AND BRANDS	PER CENT AND SOURCES OF		
	Ammonia (or Nitrogen)	Phosphoric Acid Available	Potash Soluble
Virginia–Carolina Chemical Co.			
Special Fish Preparation	1 TNCA	10 RB	0
Fish and Bone Mixture	2 "	11 "	0
Royal Ammoniated Guano	3 "	10 "	0
Truck and Vegetable Superphosphate	4 "	8 "	0
Champion Manure (Low Grade)	½ "	8 "	1 AT
Special Compound	1 "	8 "	1 "
Fish, Bone and Potash Revised	2 "	8½ "	1 "
Standard Grain Grower	1 "	8 "	2 "
Standard Crop Grower	2 "	8 "	2 "
16% Acid Phosphate	.....	16	.....
14% Acid Phosphate	.....	14	.....
Plant Food	6 tNCA	8 RB	2 AT
F. M. Wilson & Co.			
Favorite Truck Fertilizer	4 F	10 R	0
Peninsula Ammonia Super Phosphate	1½ "	12 "	0
Witherbee, Sherman & Co.			
Barium–Phosphate	.....	14	.....
Robert A. Wooldridge Co.			
Dissolved S. C. Phos. (Low Grade)	.....	12	.....
Florida Acid Phosphate	.....	14	.....
High Grade Acid Phosphate	.....	16	.....
American Potash Mixture	.....	10 R	2 A
General Crop Grower (Low Grade)	1 Ttb	8 RB	0
Success Fertilizer	1 "	10 "	0
Special Wheat and Grass Grower	1½ ATtb	10 "	0
Old Fidelity Phosphate	2 "	10 "	0
Common Sense Super Phosphate	4 TtbDAN	10 "	0
Benefactor Trucker	5 "	8 "	0
First Prize Truck Phosphate	7 "	8 "	0
Truckers Wonder	3 "	9 "	0
Farm. Fav. Cereal Comp. (Low Grade)	½ Ttb	8 "	1 A
Ammoniated Phosphate	1 "	8 "	1 "
Champion Stag Phosphate 1916	1 "	9 "	1 "
Fish Mixture No. 1 (Low Grade)	1 FTtb	7 "	1 "
Special Fish Mixture (Low Grade)	2½ "	8 "	0
Triumph Brand Phosphate 1916	1½ ATtb	10 "	1 A
Chieftan Phosphate 1916	2 "	9 "	1 "
Special Potato and Tob. Fert. 1916	2 "	10 "	1 "
H. G. Ammoniated-Potash Fert. 1916	3 "	9 "	1 "
Double Quick Phosphate 1916	2½ "	8 "	1 "
Chieftan Phosphate	2 "	8 "	2 "
Royal Crescent Trucker	5 TtbDAN	7 RB	1 "
H. G. Dissolved Animal Bone	2½	12	0
Basic Lime Phosphate (Low Grade)	.....	13 R	.....
A. S. Wooley Co., Inc.			
Strawberry Top Dressing	4 NT	8 R	0
Fish Mixture	2 FT	9 "	0
Truck Fertilizer	3 FTA	9 "	0
York Chemical Works			
Prosperity	2 ANT	12 RT	0
R. B. Special	2 "	10 RB	0
Royal Mixture	2 "	10 RT	0
Plow Brand	2 "	8 "	1 N
York Special	1 "	12 "	0
Crop Grower	1 "	10 "	0
One–Eight–One	1 "	8 "	1 N
Potato Manure	1 "	7 "	3 "
Superphosphate	.....	16	.....
Dissolved Phosphate	.....	14	.....

FERTILIZER REGISTRATION FOR 1919

(Till March 11. Later Registration Will Be Published in the August Bulletin)

The principal difference between the old Fertilizer Law and the new one that went into effect the present year, is that the fertilizer manufacturers are required to state the materials used in making their fertilizer at the time of registration, and requires this information to be published.

In order to save space it seems desirable to use abbreviations for the various substances used, for example, the letter "B" is used instead of the word "Bone." All of the abbreviations are indicated below.

Nitrogen in fertilizers may be guaranteed as its equivalent in Ammonia, but it is a violation of the Law to use both. The only substances ordinarily used in fertilizers that really contains Nitrogen as Ammonia is Ammonium Sulfate. The other materials contain Nitrogen in some other form, but as it can readily be converted to Ammonia its Ammonia equivalent is generally given. Fourteen pounds of Nitrogen will make or are equivalent to 17 pounds of Ammonia. Thus 0.82 per cent. of Nitrogen is the same as 1.00 per cent. of Ammonia. There is not a great deal of difference in the cost of Ammonia from the different sources. That from Nitrate of Soda is among the cheapest, and is very soluble in water and liable to make a fertilizer moist, because it attracts moisture. Garbage tankage is the cheapest organic Ammoniate, but is rather insoluble and of slow availability. "Base Goods" is fertilizer made from mixing Raw Rock with low-grade animal matter, such as, hair, feathers, etc., and dissolving the mixture with Sulphuric Acid. In this way matter of little value, as fertilizer, in its natural state, is made readily available. Phosphoric Acid, as a rule, comes from Dissolved Phosphate Rock, frequently called "Acid Phosphate." In Mixed Fertilizers containing tankage, fish tankage, and similar materials, a small part of the Phosphoric Acid is furnished from this source.

Potash until recently was furnished almost exclusively from Germany either as Sulphate of Potash, Muriate of Potash, Double Manure Salts or Kainit. These sources have not recently been available and an American Potash industry has sprung up, which is now able to furnish at least one-fourth as much Potash as was used five years ago. A few of our registrations call for "American Potash," this generally means Potash from Nebraska lakes. Some Potash is also furnished from ashes, and as a by-product from Cement Works and from certain organic substances that are rich in Potash; the principal one being Tobacco Stems. All of the Potash recognized in fertilizer analyses must be soluble in water, and the value of water soluble Potash from the various sources is approximately the same, pound for pound, of actual Potash. Potash insoluble in water, such as we have in certain rocks, especially Felspar, is not counted in the fertilizer analysis, as hot water only is used in extracting Potash in the laboratory.

Note the following:

KEY TO SYMBOLS USED.

AMMONIA. (Nitrogen.)	PHOSPHORIC ACID AVAILABLE.	POTASH SOLUBLE.
A—Ammonium Sulfate.	A—Animal Matter.	A—American Potash.
B—Bone.	B—Bone.	a—Ashes.
b—Base Goods.	b—Base Goods.	C—Cement by-product.
C—Cyanamid.	F—Fish.	K—Kainit.
c—Crab Scrap.	R—Dissolved Rock.	M—Muriate.
D—Blood.	T—Tankage.	m—Sheep Manure.
F—Fish.	*Total Phosphoric Acid in Bone.	N—Nebraska Potash (Sulfate and Carbonate).
H—Humus or Peat, Treated.	**Total Phosphoric Acid in Untreated Rock.	S—Sulfate.
K—Tobacco Stems.		T—Tobacco Stems.
M—C. S. Meal.		
m—Sheep Manure.		
N—Nitrate Soda.		
T—Animal Tankage.		
t—Garbage Tankge.		

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